Book-Entry Only	**Ratings:**	**Standard & Poor's**	**AA+**
		Fitch	**AA+**

CITY OF NORFOLK, VIRGINIA

$26,700,000
Water Revenue Bonds,
Series 2018

Dated: Date of Delivery **Due: November 1, as shown on the inside cover**

The City of Norfolk, Virginia (the "City"), prepared this Official Statement to provide information on the above-referenced bonds (the "2018 Bonds"). This cover page presents a summary of selected information for your convenience and does not provide a complete description of the 2018 Bonds. To make an informed decision regarding the 2018 Bonds, you should read this Official Statement in its entirety.

Tax Matters	In the opinion of Bond Counsel, under current law and assuming the compliance with certain covenants by the City and the accuracy of certain representations and certifications made by certain City officials and other persons and entities described in "TAX MATTERS" herein, interest on the 2018 Bonds (i) is excludable from the gross income of the owners thereof for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986, as amended and (ii) is not a specific item of tax preference for purposes of the federal alternative minimum tax imposed on individuals. Bond Counsel is further of the opinion that interest on the 2018 Bonds is excludable from gross income for purposes of income taxation by the Commonwealth of Virginia. Bond Counsel expresses no opinion regarding any other tax consequence related to the ownership or disposition of, or the accrual or receipt of interest on, the 2018 Bonds. See the section herein "TAX MATTERS" regarding other tax considerations.
Security	The 2018 Bonds are limited obligations of the City payable solely from Net Revenues derived from the City's water system and other funds pledged for their payment under the terms of the Indenture. Neither the faith and credit of the Commonwealth of Virginia nor the faith and credit of any county, city, town or other political subdivision of the Commonwealth of Virginia, including the City, is pledged to the payment of principal of, premium, if any, or interest on the 2018 Bonds. See "SECURITY AND SOURCES OF PAYMENT FOR THE BONDS" herein.
Redemption	See inside cover of this Official Statement and the section entitled "DESCRIPTION OF THE BONDS – Redemption," for a description of the redemption provisions with respect to the 2018 Bonds.
Authorization	Ordinance No. 47,117 enacted by the City Council on January 23, 2018.
Purpose	The proceeds of the 2018 Bonds will be used, together with other available funds (i) to finance certain costs of acquiring, constructing and equipping capital improvements to the City's water system and (ii) to pay certain costs of issuance of the 2018 Bonds. See "SOURCES AND USES OF FUNDS" herein.
Interest Payment Dates	Semi-annually on May 1 and November 1, beginning November 1, 2018.
Registration	Book-Entry Only; The Depository Trust Company. See "DESCRIPTION OF THE BONDS – Book-Entry Only System" and Appendix G herein.
Denomination	$5,000 or multiples thereof.
Closing/Delivery Date	On or about March 27, 2018.
Bond Counsel	McGuireWoods LLP, Richmond, Virginia.
Financial Advisor	PFM Financial Advisors LLC, Arlington, Virginia.
Registrar/Paying Agent/Trustee	U.S. Bank National Association.
Issuer Contact	Director of Finance of the City. (757) 664-4346.

Dated: March 13, 2018

CITY OF NORFOLK, VIRGINIA

$26,700,000
WATER REVENUE BONDS, SERIES 2018

(Base CUSIP Number 656009)**

MATURITY, AMOUNTS, INTEREST RATE, PRICE AND YIELD

$12,855,000 Serial Bonds

Year of Maturity (November 1)	Principal Amount	Interest Rate	Price	Yield	CUSIP** Number
2024	$600,000	2.500%	101.646%	2.230%	MX2
2025	620,000	5.000	118.790	2.290	MY0
2026	650,000	5.000	119.995	2.410	MZ7
2027	685,000	5.000	120.922	2.530	NA1
2028	720,000	5.000	120.261*	2.600*	NB9
2029	760,000	5.000	119.791*	2.650*	NC7
2030	795,000	5.000	119.137*	2.720*	ND5
2031	835,000	5.000	118.673*	2.770*	NE3
2032	880,000	5.000	118.303*	2.810*	NF0
2033	925,000	5.000	117.659*	2.880*	NG8
2034	970,000	5.000	117.292*	2.920*	NH6
2035	1,020,000	5.000	116.927*	2.960*	NJ2
2036	1,075,000	5.000	116.292*	3.030*	NK9
2037	1,130,000	5.000	115.931*	3.070*	NL7
2038	1,190,000	5.000	115.661*	3.100*	NM5

$6,920,000 5.000% Term 2043 Bonds due November 1, 2043, Priced at 115.302%* to Yield 3.140%*
CUSIP Number 656009 NN3**

$6,925,000 5.000% Term 2047 Bonds due November 1, 2047, Priced at 114.945%* to Yield 3.180%*
CUSIP Number 656009 NP8**

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* Priced to first optional redemption date of November 1, 2027.

** See the last paragraph on page (i) regarding the use of CUSIP information in this Official Statement.

Optional Redemption for the 2018 Bonds. The 2018 Bonds are subject to redemption before maturity at the option of the City at any time on or after November 1, 2027, from any money available for such purpose, in whole or in part (in increments of $5,000), at par plus accrued and unpaid interest to the date fixed for redemption.

Mandatory Redemption for the 2018 Bonds. The 2018 Bonds are term bonds maturing on November 1, 2043, and are subject to mandatory redemption in part, on November 1 in the years and in the amounts set forth below, at a redemption price equal to 100% of the principal amount of such 2018 bonds to be redeemed, plus the unpaid interest accrued thereon to the date fixed for redemption:

Year	**Amount**
2039	$1,250,000
2040	1,315,000
2041	1,380,000
2042	1,450,000
2043 (final maturity)	1,525,000

The 2018 Bonds are term bonds maturing on November 1, 2047, and are subject to mandatory redemption in part, on November 1 in the years and in the amounts set forth below, at a redemption price equal to 100% of the principal amount of such 2018 bonds to be redeemed, plus the unpaid interest accrued thereon to the date fixed for redemption:

Year	**Amount**
2044	$1,605,000
2045	1,685,000
2046	1,770,000
2047 (final maturity)	1,865,000

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CITY OF NORFOLK, VIRGINIA

CITY COUNCIL

Kenneth Cooper Alexander, Mayor
Dr. Theresa W. Whibley, Vice Mayor

Mamie B. Johnson
Andria P. McClellan
Paul R. Riddick
Thomas R. Smigiel
Martin A. Thomas, Jr.
Angelia M. Williams Graves

CITY OFFICIALS

Douglas L. Smith, City Manager
Christine Garczynski, Director of Finance
Kristen M. Lentz, P.E., Director of Utilities
Bernard A. Pishko, City Attorney

BOND COUNSEL

McGuireWoods LLP
Richmond, Virginia

FINANCIAL ADVISOR

PFM Financial Advisors, LLC
Arlington, Virginia

CONSULTING ENGINEER

Black & Veatch
Chesterfield, Missouri

The 2018 Bonds are exempt from registration under the Securities Act of 1933, as amended. The 2018 Bonds are also exempt from registration under the securities laws of the Commonwealth of Virginia.

No dealer, broker, salesman or other person has been authorized by the City to give any information or to make any representations other than those contained in this Official Statement, and, if given or made, such other information or representations must not be relied upon as having been authorized by the City. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the 2018 Bonds by any person in any jurisdiction in which it is unlawful for such person to make an offer, solicitation or sale. This Official Statement is not to be construed as a contract or agreement between the City and the purchasers or owners of any of the 2018 Bonds. The information and expressions of opinion in this Official Statement are subject to change without notice, and neither the delivery of this Official Statement nor any sale made under it will, under any circumstances, create any implication that there has been no change in the affairs of the City since the respective dates as of which information is given herein.

Third parties may engage in transactions that stabilize, maintain or otherwise affect the price of the 2018 Bonds, including transactions to (i) overallot in arranging the sales of the 2018 Bonds and (ii) make purchases in sales of the 2018 Bonds, for long or short accounts, on a when-issued basis or otherwise, at such prices, in such amounts and in such manner as such parties may determine. Such stabilization, if commenced, may be discontinued at any time.

All quotations from, and summaries and explanations of, provisions of law and documents herein do not purport to be complete and reference is made to such laws and documents for full and complete statements of their provisions. Any statements made in this Official Statement involving estimates or matters of opinion, whether or not expressly so stated, are intended merely as estimates or opinions and not as representations of fact.

This Official Statement contains statements which, to the extent they are not recitations of historical fact, constitute "forward-looking statements." In this respect, the words, "estimate," "project," "anticipate," "expect," "intend," "believe" and similar expressions are intended to identify forward-looking statements. A number of important factors affecting the water revenues or the City's financial results, or both, could cause actual results to differ materially from those stated in the forward-looking statements.

A registered trademark of the American Bankers Association ("ABA"), used by Standard & Poor's in its operation of the CUSIP Service Bureau for the ABA. The CUSIP (Committee on Uniform Securities Identification Procedures) numbers used in this Official Statement have been assigned by an organization not affiliated with the City, and the City is not responsible for the selection or use of the CUSIP numbers. The CUSIP numbers are included solely for the convenience of bondholders, and the City makes no representation as to the correctness of such CUSIP numbers. CUSIP numbers assigned to securities may be changed during the term of such securities based on a number of factors including, but not limited to, the refunding or defeasance of such securities or the use of secondary market financial products. The City has not agreed to, and there is no duty or obligation to, update this Official Statement to reflect any change or correction in the CUSIP numbers used in this Official Statement.

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OFFICIAL STATEMENT

Relating to the Issuance of

$26,700,000
City of Norfolk, Virginia
Water Revenue Bonds,
Series 2018

INTRODUCTORY STATEMENT

The purpose of this Official Statement, including the information contained in the Appendices, is to furnish information relating to the City of Norfolk, Virginia (the "City"), its water supply, treatment, storage and distribution system (the "System" or the "Water System") and its $26,700,000 Water Revenue Bonds, Series 2018 (the "2018 Bonds"). This Official Statement has been authorized by the City for use in connection with the sale of the 2018 Bonds.

The 2018 Bonds will be issued pursuant to the Public Finance Act of 1991, Chapter 26 of Title 15.2 of the Code of Virginia of 1950, as amended (the "Act"). The 2018 Bonds are being issued under the provisions of a Master Indenture of Trust dated as of November 1, 1993, as previously supplemented and amended (the "Master Indenture"), between the City and U.S. Bank National Association, Richmond, Virginia, as successor trustee (together with any successor, the "Trustee"), and as further supplemented by a Thirteenth Supplemental Indenture of Trust dated as of March 1, 2018 (the "Thirteenth Supplemental Indenture"), between the City and the Trustee. The Master Indenture and the Thirteenth Supplemental Indenture are referred to collectively herein as the "Indenture."

Certain capitalized terms not otherwise defined herein shall have the meanings set forth in the Indenture. See "Appendix A – DEFINITIONS AND SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE" hereto.

The 2018 Bonds are the thirteenth Series of Bonds issued under the Master Indenture. Set forth in the following chart are the issue dates, original principal amounts and outstanding principal amounts of the five prior Series of Bonds with Bonds currently Outstanding (the "Outstanding Bonds"):

Series of Bonds with Bonds Outstanding

Series of Bonds	Issue Date	Original Principal Amount	Outstanding Principal Amount as of March 1, 2018
Water Revenue Bonds, Series 2008 (the "2008 Bonds")	April 23, 2008	$ 58,415,000	$ 1,355,000
Water Revenue Bonds, Series 2010 (the "2010 Bonds")	September 30, 2010	47,415,000	22,755,000
Water Revenue Refunding Bonds, Series 2012 (the "2012 Bonds")	April 4, 2012	176,925,000	54,445,000
Water Revenue Bonds, Series 2015A and Water Revenue Refunding Bonds, Series 2015B (collectively, the "2015 Bonds")	April 16, 2015	83,680,000	83,680,000
Water Revenue Refunding Bonds, Series 2017 (the "2017 Bonds")	December 18, 2017	134,545,000	134,545,000
Total		$566,860,000	$296,780,000

The 2018 Bonds will be limited obligations of the City payable solely from Net Revenues derived from the System and other funds pledged for the payment under the terms of the Indenture. Neither the faith and credit of the Commonwealth of Virginia (the "Commonwealth") nor the faith and credit of any county, city, town or other subdivision of the Commonwealth, including the City, is pledged to the payment of the principal of, premium, if any, or interest on the 2018 Bonds. See "SECURITY AND SOURCES OF PAYMENT FOR THE BONDS" below.

The 2018 Bonds will be issued in authorized denominations of $5,000, or whole multiples thereof, and held in book-entry only form by The Depository Trust Company ("DTC"), or its nominee, as securities depository with respect to the 2018 Bonds. See "DESCRIPTION OF THE BONDS – Book-Entry Only System" below and Appendix G herein. The 2018 Bonds are subject to optional redemption prior to their stated maturities. See "DESCRIPTION OF THE BONDS – Redemption" below.

All financial and other information presented in this Official Statement has been provided by the City and other sources that are believed to be reliable. The presentation of information is intended to show recent historic information and is not intended, unless specifically stated, to indicate future continuing trends in the financial position or other affairs of the System. No representation is made that past experience, as is shown by such financial and other information, will necessarily continue or be repeated in the future.

This Official Statement should be considered in its entirety, and no one subject discussed should be considered less important than any other by reason of its location in the text. Reference should be made to the laws, reports or other documents referred to in this Official Statement, including the Indenture, as hereinafter defined, for more complete information regarding their contents.

AUTHORIZATION AND PURPOSE

The 2018 Bonds have been authorized by Ordinance No. 47,117 enacted by the City Council on January 23, 2018. The City is issuing the 2018 Bonds and using the proceeds thereof, together with other available funds (i) to finance certain costs of acquiring, constructing and equipping capital improvements to the City's water system and (ii) to pay certain costs of issuance of the 2018 Bonds.

PLAN OF FINANCE

Capital Projects Financing

The City expects to use a portion of the proceeds of the 2018 Bonds to pay the costs of projects identified in the City's Capital Improvement Program (the "CIP") for the System, as the City Council may amend it from time to time. See "CAPITAL IMPROVEMENT PROGRAM" below.

DESCRIPTION OF THE BONDS

General

The 2018 Bonds will be dated the date of delivery, and will mature on November 1 in the years and amounts and bear interest at the rates set forth on the inside cover page of this Official Statement. Interest on the 2018 Bonds will be payable semi-annually on May 1 and November 1, commencing November 1, 2018. The Trustee will act as paying agent for the 2018 Bonds under the Indenture. The 2018 Bonds will be subject to optional redemption prior to their stated maturities as described herein. The Thirteenth Supplemental Indenture establishes the April 15 and October 15 preceding each payment date as the record date for the 2018 Bonds and establishes that interest on the 2018 Bonds is computed on the basis of a year of 360 days and 12 months of 30 days each.

Book-Entry Only System

Appendix G contains a description of DTC's procedures and recordkeeping with respect to beneficial ownership interests in the 2018 Bonds, payments of principal and interest on the 2018 Bonds to DTC, its nominee, Direct Participants, Indirect Participants or Beneficial Owners (each as defined in Appendix G), confirmation and transfer to beneficial ownership interests in the 2018 Bonds and other bond-related transactions by and between DTC, Direct Participants, Indirect Participants and Beneficial Owners. Such description is based solely on information furnished by DTC and the City makes no any representations about such information. **So long as DTC or its nominee, Cede & Co., is the registered owner of the 2018 Bonds, any such notices of redemption will be mailed solely to DTC and distribution of such notices to Direct Participants and Indirect Participants (each as defined in**

Appendix G) will be the sole responsibility of DTC, and distribution of such notices to Beneficial Owners (as defined in Appendix G) will be the sole responsibility of the Direct Participants and Indirect Participants.

Redemption

Optional Redemption. The 2018 Bonds are subject to redemption before maturity at the option of the City at any time on or after November 1, 2027, from any moneys available for such purpose, in whole or in part (in increments of $5,000), at par plus accrued and unpaid interest to the date fixed for redemption.

Mandatory Sinking Fund Redemption The 2018 Bonds are term bonds maturing on November 1, 2043, and are subject to mandatory redemption in part, on November 1 in the years and in the amounts set forth below, at a redemption price equal to 100% of the principal amount of such 2018 bonds to be redeemed, plus the unpaid interest accrued thereon to the date fixed for redemption:

Year	Amount
2039	$1,250,000
2040	1,315,000
2041	1,380,000
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Year	Amount
2044	$1,605,000
2045	1,685,000
2046	1,770,000
2047 (final maturity)	1,865,000

Notice of Redemption. Any redemption of the 2018 Bonds is required by the Indenture to be made upon notice of redemption given by certified mail to DTC or, if the book-entry only system is discontinued as described above, by first class mail, postage prepaid, not less than 30 nor more than 60 days before the date fixed for redemption, to the registered owners of the 2018 Bonds to be redeemed and to the Municipal Securities Rulemaking Board (the "MSRB"), as set forth in the Indenture.

Each notice of redemption will contain, among other things, the CUSIP identification number and the number of the 2018 Bonds (or portions thereof) being called for redemption, the redemption date and price and the address at which the 2018 Bonds are to be surrendered for payment of the redemption price. Such notice may state that the redemption of the 2018 Bonds to be redeemed is conditioned upon the occurrence of certain future events, including, without limitation, the deposit with the Trustee of moneys sufficient to effect the redemption on or before the date fixed therefor.

Any defect in such notice or the failure to mail any such notice to the registered owner of any 2018 Bond called for redemption will not affect the validity of the proceedings for the redemption of any other 2018 Bond. Any defect in such notice or the failure to mail any such notice to the MSRB will not affect the validity of the proceedings for the redemption of the 2018 Bonds. As long as the book-entry only system is used for determining ownership of the 2018 Bonds, the City shall send notice to DTC or its nominee, or its successor. Any failure of DTC or its nominee or of a Direct Participant or Indirect Participant to notify a Direct Participant, Indirect Participant or Beneficial Owner of any 2018 Bond called for redemption will not affect the validity of the proceedings for the redemption of such 2018 Bond. If less than all of the 2018 Bonds are called for redemption, the maturities of such 2018 Bonds to be redeemed shall be selected by the Director of Finance of the City in such manner as he or she in his or her discretion may determine. So long as a book-entry system is used for determining beneficial ownership of the 2018 Bonds, if less than all of the 2018 Bonds within a maturity are to be redeemed, DTC and its participants shall determine which of the 2018 Bonds within a maturity are to be redeemed.

SECURITY AND SOURCES OF PAYMENT FOR THE BONDS

Pledge Under the Indenture

The 2018 Bonds, all Outstanding Bonds and any Additional Bonds issued under the Indenture (collectively, the "Bonds") are limited obligations of the City payable from Net Revenues and reserves held for such purpose. The term "Net Revenues" is defined in the Indenture as Revenues less Operating Expenses. As defined in the Indenture, "Revenues" include all revenues, receipts and other income derived by the City from the ownership or operation of the System including, without limitation, investment earnings and transfers, if any, from the Rate Stabilization Fund, but excluding (i) any gift, grant or contribution to the extent restricted by the donor or grantor to a particular purpose inconsistent with its use for the payment of debt service on Bonds, Parity Indebtedness or Subordinate Debt, (ii) proceeds derived from insurance or condemnation and (iii) any transfers from the Revenue Fund to the Rate Stabilization Fund. "Operating Expenses," as defined in the Indenture, include all current expenses directly or indirectly attributable to the ownership or operation of the System, but do not include (i) any allowance for amortization or depreciation, (ii) deposits or transfers to the Bond Fund, the Parity Debt Service Fund, the Debt Service Reserve Fund, the Subordinate Debt Service Fund, the Repair and Replacement Reserve Fund or the Rate Stabilization Fund, (iii) payments for Existing Debt Service on City Obligations and (iv) expenditures which the City makes an election to capitalize.

The City may incur "Parity Indebtedness" equally and ratably secured by Net Revenues with the Bonds on terms and conditions similar to those required for the issuance of Additional Bonds. Parity Indebtedness is not secured by the Debt Service Reserve Fund. The City also may issue "Subordinate Debt" secured by a pledge of Net Revenues that is expressly made subordinate to the pledge of Net Revenues securing Bonds or Parity Indebtedness or which is unsecured. **There is no Parity Indebtedness or Subordinate Debt outstanding.**

The City has entered into wholesale contracts with the United States Navy, the Western Tidewater Water Authority, and the Cities of Virginia Beach, Chesapeake and Portsmouth. Payments received by the City under these contracts constitute Revenues. See "THE SYSTEM – Wholesale Contracts" below and "Appendix E – SUMMARY OF WHOLESALE CONTRACTS" hereto for a more detailed discussion of these contracts.

Neither the faith and credit of the Commonwealth nor the faith and credit of any county, city, town or other political subdivision of the Commonwealth, including the City, is pledged to the payment of the principal of, premium, if any, or interest on the Bonds, including the 2018 Bonds.

Revenue Covenant

The City has covenanted in the Indenture that it will establish, fix, charge and collect rates, fees and other charges for the use of and for the services furnished by the System, and will, from time to time and as often as appears necessary, revise such rates, fees and other charges, so that in each fiscal year ended June 30 ("Fiscal Year"), Net Revenues are not less than the greater of (i) the sum of 1.1 times debt service on Bonds and Parity Indebtedness and 1.0 times debt service on Subordinated Debt for the Fiscal Year and (ii) 1.0 times the funding requirements for transfers from the Revenue Fund to the Operating Fund, the Bond Fund, the Parity Debt Service Fund, the Debt Service Reserve Fund, the Subordinate Debt Service Fund and the Repair and Replacement Reserve Fund (the "Revenue Covenant").

Additional Bonds and Parity Indebtedness

The City may issue Additional Bonds or Parity Indebtedness for "new money" purposes upon receipt of a written certificate of the Director of Finance or, at the City's option, the Consulting Engineer which states that the amount of the Net Revenues as received during any 12 consecutive months of the 24 months immediately preceding the issuance of the Bonds or Parity Indebtedness (the "Test Period"), as adjusted as set forth below, will satisfy the

Revenue Covenant for the Test Period taking into account the maximum annual debt service due on (i) the Bonds and Parity Indebtedness then outstanding and (ii) the Bonds or Parity Indebtedness to be issued. The Net Revenues which are permitted to be certified by the Director of Utilities or the Consulting Engineer to the Director of Finance may be adjusted as follows:

(a) If the City has increased the rates, fees or other charges for the services or use of the System, the Net Revenues for the Test Period will be adjusted to include the Net Revenues which would have been derived from the System during the Test Period as if such increased rates, fees or other charges for the services or use of the System had been in effect during the Test Period.

(b) If the City has acquired or has contracted to acquire any privately or publicly-owned existing water system, sewer system, sewage disposal system, solid waste collection or disposal system, stormwater collection or disposal system, or any other utility system that the City will consolidate with the System, the cost of which will be paid from all or part of the proceeds of the issuance of the proposed Bonds or Parity Indebtedness, then the Net Revenues derived from the System during the Test Period will be increased by adding to the Net Revenues for the Test Period the projected Net Revenues which would have been derived from the System if such utility system had been operated by the City as part of the System during the Test Period.

(c) If the City has entered into a contract on or before the date of the issuance of the proposed Bonds or Parity Indebtedness with any public body whereby the City has agreed to furnish services consistent with the services performed by the System, which contract (i) is for a duration of not less than the final maturity of the Bonds or Parity Indebtedness proposed to be issued, or (ii) if less than the final maturity of such Bonds or Parity Indebtedness, contains provisions obligating the party contracting with the City to pay in full its allocated share of capital improvements to the System needed to carry out the terms of the contract, then the Net Revenues of the System during the Test Period will be increased by the least amount which the entity receiving such services will be required to pay by the terms of the contract in any one year during which the City is to furnish such services and such Bonds or Parity Indebtedness are anticipated to be outstanding, after deducting from such payment the estimated amount of operating expenses and repair, renewal and replacement costs attributable in such year to such services.

(d) If there is an estimated increase in Revenues to be received by the City, as a result of additions, extensions or improvements to the System within three years after delivery of the proposed Bonds or Parity Indebtedness and the governing body of the City has taken official action authorizing the additions, extensions or improvements (and if the project involves another jurisdiction, the governing body of that jurisdiction has given appropriate approval), then the Net Revenues derived from the System during the Test Period will be increased by the average annual additional Net Revenues estimated for the first two full Fiscal Years after such additions, extensions or improvements are placed in service.

See "Appendix A – DEFINITIONS AND SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – Summary of Certain Provisions of the Indenture – Additional Bonds" and "– Parity Indebtedness" for additional information regarding the conditions for the issuance of Additional Bonds and Parity Indebtedness.

Debt Service Reserve Fund and Series Reserve Accounts

The Indenture establishes a Debt Service Reserve Fund which provides additional security for the 2008 Bonds and the 2010 Bonds (collectively, the "Prior Series") and each Series of Bonds for which the City opts to provide such additional security on a combined basis. As of January 1, 2018, the Prior DSR Requirement was $2,161,067.37 and the balance in the Debt Service Reserve Fund was approximately $2,212,980.36. The Indenture also permits the City to establish a separate account within the Debt Service Reserve Fund for any Series of Bonds other than the Prior Series and provide for the calculation of a separate Debt Service Reserve Requirement for such Series, which may be zero. Such Series of Bonds will have no claim on the other moneys deposited to the credit of the Debt Service Reserve Fund or any account therein. The Debt Service Reserve Requirement for the 2012 Bonds, the 2013 Bonds, 2015 Bonds and 2017 Bonds is zero. **The Thirteenth Supplemental Indenture provides for the establishment of such a separate account in the Debt Service Reserve Fund for the 2018 Bonds and provides that the Debt Service Reserve Requirement for the 2018 Bonds is zero.** See "Appendix A – DEFINITIONS AND SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – Summary of Certain Provisions of the Indenture – Debt Service Reserve Fund."

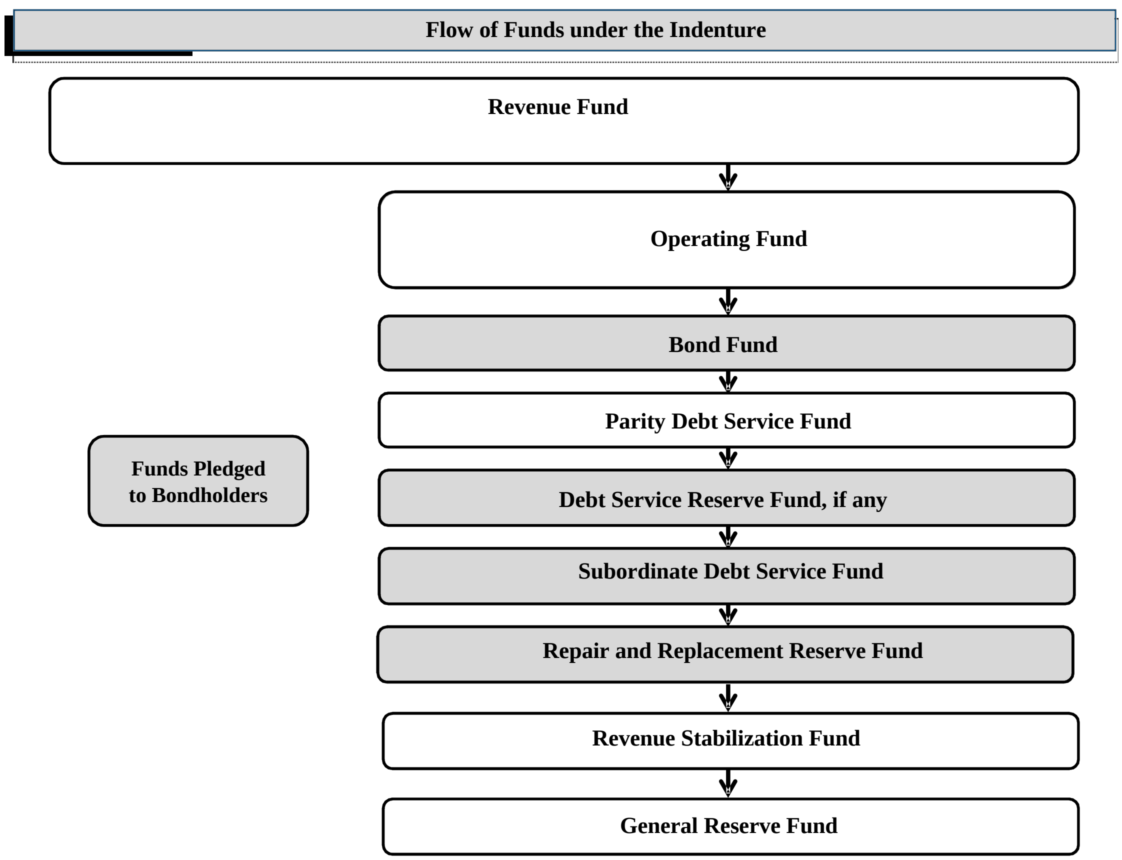
Neither the Debt Service Reserve Fund nor any account therein secures Parity Indebtedness that may be outstanding from time to time.

Other Debt

In the past, the City has issued general obligation to pay for improvements to the Water System. However, the City expects that future capital costs for the Water System which are financed with debt will be paid from proceeds of Bonds issued pursuant to the Indenture. Since Fiscal Year 2016, no general obligation bonds attributable to the Water System were outstanding.

Flow of Funds

The Indenture provides that the City will collect and deposit in the Revenue Fund as received all Revenues derived from the ownership or operation of the System, except as otherwise provided for in the Indenture for investment income on certain funds and accounts created by the Indenture. Set forth below is the flow of funds under the Indenture.



In the event there are insufficient funds in the Revenue Fund to make the transfers required by the Bond Fund and the Parity Debt Service Fund, the City will allocate the available funds between the Bond Fund and the Parity Debt Service Fund in the proportion that the amount required to be deposited to each Fund bears to the total amount required to be deposited to both Funds.

See "Appendix A – DEFINITIONS AND SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE" hereto for a further description of the flow of funds.

Limits on Enforceability

The enforceability of the Indenture and the 2018 Bonds is subject to bankruptcy, insolvency, moratorium, reorganization and other state and federal laws affecting the enforcement of creditors' rights and to the extent that certain remedies under such agreements or instruments require, or may require, enforcement by a court, such principles of equity as the court having jurisdiction may impose. See "Appendix A – DEFINITIONS AND SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – Summary of Certain Portions of the Indenture – Events of Default" and "– Remedies; Rights of Bondholders" hereto.

Bankruptcy. Chapter 9 of the United States Bankruptcy Code (the "Bankruptcy Code") permits a municipality such as the City, if insolvent or otherwise unable to pay its debts as they become due, to file a voluntary petition for the adjustment of debts provided that such municipality is "specifically authorized, in its capacity as a municipality or by name, to be a debtor..." Bankruptcy Code, §109(c)(2). Current Virginia statutes do not expressly authorize the City or municipalities generally to file under Chapter 9. Chapter 9 does not authorize the filing of involuntary petitions against municipalities such as the City.

Bankruptcy proceedings by the City could have adverse effects on holders of the 2018 Bonds, including (i) delay in the enforcement of their remedies, (ii) subordination of their claims to claims of those supplying goods and services to the City after the initiation of bankruptcy proceedings and to the administrative expenses of bankruptcy proceedings and (iii) imposition without their consent of a plan of reorganization reducing or delaying payment of the 2018 Bonds. The Bankruptcy Code contains provisions intended to ensure that, in any plan of reorganization not accepted by at least a majority of any class of creditors such as the holders of the 2018 Bonds, such class of creditors will have the benefit of their original claim or its "indubitable equivalent," although such "equivalent" may not provide for payment of the 2018 Bonds in full. The effect of these and other provisions of the Bankruptcy Code cannot be predicted and may be significantly affected by judicial interpretation.

SOURCES AND USES OF FUNDS

The expected amounts of the proceeds of the 2018 Bonds and certain other related City funds and the application thereof are as follows:

Sources of Funds:		
Par Amount of the 2018 Bonds	$	26,700,000.00
Original Issue Premium on the 2018 Bonds		4,304,171.50
Equity Contribution		195,560.42
Total Sources of Funds	$	31,199,731.92
Uses of Funds:		
Project Fund	$	31,000,000.00
Costs of Issuance		160,000.00
Underwriter's Discount		35,560.42
Additional Proceeds		4,171.50
Total Uses of Funds............................	$	31,199,731.92

DEBT SERVICE REQUIREMENTS

Annual service requirements on the currently Outstanding Bonds, together with the 2018 Bonds, are shown in the table below. Totals may not sum due to rounding.

	Total Debt Service (as of January 1, 2018)		**2018 Bonds**		**Total Debt Service**
Fiscal Year	Total	Principal	Interest	Debt Service	Total
2018	$6,503,345	$ -	$ -	$ -	$6,503,345
2019	28,613,800	-	1,444,667	1,444,667	30,058,467
2020	27,554,375	-	1,320,000	1,320,000	28,874,375
2021	28,956,275	-	1,320,000	1,320,000	30,276,275
2022	29,354,400	-	1,320,000	1,320,000	30,674,400
2023	29,647,275	-	1,320,000	1,320,000	30,967,275
2024	29,807,900	-	1,320,000	1,320,000	31,127,900
2025	26,920,025	600,000	1,312,500	1,912,500	28,832,525
2026	27,094,400	620,000	1,289,500	1,909,500	29,003,900
2027	19,153,450	650,000	1,257,750	1,907,750	21,061,200
2028	19,217,500	685,000	1,224,375	1,909,375	21,126,875
2029	19,360,525	720,000	1,189,250	1,909,250	21,269,775
2030	13,990,013	760,000	1,152,250	1,912,250	15,902,263
2031	14,241,650	795,000	1,113,375	1,908,375	16,150,025
2032	14,083,500	835,000	1,072,625	1,907,625	15,991,125
2033	12,026,894	880,000	1,029,750	1,909,750	13,936,644
2034	12,037,825	925,000	984,625	1,909,625	13,947,450
2035	12,077,444	970,000	937,250	1,907,250	13,984,694
2036	12,097,713	1,020,000	887,500	1,907,500	14,005,213
2037	10,731,131	1,075,000	835,125	1,910,125	12,641,256
2038	10,753,931	1,130,000	780,000	1,910,000	12,663,931
2039	10,779,763	1,190,000	722,000	1,912,000	12,691,763
2040	8,584,644	1,250,000	661,000	1,911,000	10,495,644
2041	8,584,856	1,315,000	596,875	1,911,875	10,496,731
2042	8,587,488	1,380,000	529,500	1,909,500	10,496,988
2043	8,581,863	1,450,000	458,750	1,908,750	10,490,613
2044	9,220,494	1,525,000	384,375	1,909,375	11,129,869
2045	9,220,856	1,605,000	306,125	1,911,125	11,131,981
2046	-	1,685,000	223,875	1,908,875	1,908,875
2047	-	1,770,000	137,500	1,907,500	1,907,500
2048	-	1,865,000	46,625	1,911,625	1,911,625
Total	$467,783,335	$26,700,000	$27,177,167	$53,877,167	$521,660,502

Source: Department of Finance.

DEPARTMENT OF UTILITIES

Introduction

The Department of Utilities (the "Department") operates and maintains the City's water and wastewater systems and oversees the Water and Wastewater Enterprise Funds. For additional information about the City, see "Appendix D – CERTAIN INFORMATION CONCERNING THE CITY" hereto.

The City operates under the council-manager form of government. Policymaking and legislative authorities are vested in the governing City Council, which consists of a mayor and seven-member council. Members of the City Council serve four-year staggered terms. The City Council appoints the City Manager. The City Council is the only body with authority to set water rates and fees charged by the City.

The principal members of the City's management team and their experience are described in Appendix D to this Official Statement.

Organizational Structure

The Department currently employs approximately 240 employees who are grouped into seven divisions. A brief description of each division follows:

Director's Office	Responsible for overall administration of the Department, including public information, human resources and grants management.
Water Production	Responsible for operation and maintenance of water treatment plants and finished water storage facilities. Maintains raw and finished water pump stations and raw water transmission mains. Reviews any encroachments or activities on the reservoirs.
Water Quality	Responsible for assuring that System water continues to meet state and federal regulations through laboratory analysis and reporting to regulatory agencies. Manages raw water resources.
Water Distribution	Responsible for the maintenance of over 800 miles of water mains. Also responsible for repair, replacement and installation of fire hydrants and valves and the detection of leaks in the distribution system. Provides routine flushing of water mains and the installation of service main extensions.
Engineering	Responsible for engineering design, construction oversight, contract management and capital improvement program development. Also responsible for underground utility identification under the Miss Utility program, and other engineering functions.
Accounting and Budget	Responsible for financial oversight, budgeting and expenditure tracking for all phases of the utility operations. Coordinates with the City's Finance Department to maintain consistency in financial reporting and recordkeeping.
Water Accounts	Responsible for handling customer service inquiries concerning billing and establishment and disconnection of services. Coordinates the reading of meters. Also responsible for billing and collection activities in conjunction with joint billing arrangement with Hampton Roads Sanitation District ("HRSD").

A summary of the Department's management team and their experience is as follows:

Kristen M. Lentz, P.E., Director of Utilities

Kristen M. Lentz, P.E., was appointed Acting Director of Utilities in 2001 and Director of Utilities in 2002. Ms. Lentz is a registered professional engineer and has approximately 39 years of professional experience. Prior to her appointment, Ms. Lentz held the positions of Assistant Director of Public Works for the City for nine years and has served as City Engineer and Director of Engineering and Utilities for the City of Poquoson, Virginia. She holds a Bachelor of Science degree in Civil Engineering from Old Dominion University, Norfolk, Virginia. She also serves on the Old Dominion University Civil and Environmental Engineering Visiting Council. In February 2015, Ms. Lentz was appointed by Virginia's Governor to serve on the Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals.

Robert A. Carteris, Assistant Director of Utilities

Robert A. Carteris, the Department's Assistant Director, has worked for the Department since March 2007. Prior to his appointment as Assistant Director, Mr. Carteris held the position of Manager of Budget and Accounting of the Department of Utilities and had been a senior financial officer for various European-based multinational companies engaged in manufacturing, international trade, shipping and logistics. He has over 40 years of professional experience in accounting, finance, treasury and administration. He holds a Bachelor of Science degree in Accounting from Manhattan College, New York, New York and a Master of Business Administration and Policy from Baruch College, New York, New York.

Cherryl F. Barnett, P.E., Engineering Manager

Cherryl F. Barnett, P.E., has worked for the Department since February 2015 as the Department's Engineering Manager. Ms. Barnett is a registered professional engineer and has been licensed with the Commonwealth for 32 years. She holds Bachelor's and Master's degrees in Civil Engineering from Old Dominion University, Norfolk, Virginia. Her responsibilities with the Department include overseeing the City's CIP and administering the annual budget which includes replacement of water and sewer pipes throughout the City, upgrades to water treatment plants and improvements to water supply reservoirs. Prior to working for the City, Ms. Barnett spent 33 years as a civilian engineer with the Navy, most recently with the Naval Facilities Engineering Command Atlantic.

Chris E. Harbin, Water Production Manager

Chris E. Harbin has served as the Department's Water Production Manager since February 2010. Mr. Harbin has over 34 years of experience in water treatment plant management and operations. His experience includes positions from Waterworks Treatment Plant Operator to Water Treatment Plant Manager. He holds a Bachelor of Science degree in Biology from Christopher Newport University, Newport News, Virginia. Mr. Harbin currently serves on the Virginia Section American Waterworks Association ("AWWA") Plant Operations Committee.

Harvey E. Howard, Utility Operations Manager

Harvey E. Howard, began serving as the Department's Utility Operations Manager in November 2016. Mr. Howard has over 20 years of professional experience in both private and public waste management operations, including the Marine Corps Office. Mr. Howards holds a Bachelor of Science degree in Education from the University of Oklahoma, Norman, Oklahoma. He previously served on the Board of Directors of the Southeastern Public Services Authority and was recognized as the 2014 American Public Works Association - Solid Waste – Professional Manager of the Year.

Jillian M. Terhune, Water Quality Manager

Jillian M. Terhune has been with the Department of Utilities since September 2016, as the Department's Water Quality Manager. Prior work experience includes serving as a Soil and Water Scientist with the USDA-Natural Resource Conversation Service (NRCS) and an Outreach Assistant with a municipal storm water planning office located in Rhode Island. Ms. Terhune also worked as the Laboratory Supervisor at Mount Pleasant Waterworks, a treatment facility that provides both drinking water and wastewater treatment services. Ms. Terhune holds a Master of Science degree in Environmental Science from the University of Charleston, Charleston, South Carolina. Ms. Terhune is active in the Virginia AWWA Laboratory Practices Committee and AWWA Young Professionals.

Trinette D. Hodges, Customer Service Manager

Trinette D. Hodges has served as the Department's Customer Service Manager since February 2008. Her responsibilities include overseeing the Department's call center, collection and billing divisions. Ms. Hodges has over 20 years of professional experience and is a member of multiple professional organizations. Prior to joining the Department, she held various management positions in both customer service and quality in the private sector. Ms. Hodges holds a Bachelor of Arts degree in Rhetoric and Communications from the University of Virginia, Charlottesville, Virginia.

Harry C. Kenyon, A.P.R., Management Services Administrator

Harry C. Kenyon, A.P.R., has served as the Department's Management Services Administrator since October 2008. He has 38 years of public relations experience in federal, state and municipal agencies. Before joining the

Department, he was the Public Relations Manager for the Hampton Roads District of the Virginia Department of Transportation and with the City of Chesapeake, Virginia as the Public Works Information Specialist. He also served 22 years in the U.S. Navy as a Chief Journalist and Public Affairs Officer and was assigned as the staff journalist for the Chief of Naval Operations in the Pentagon. He retired from active service in June 1999. He is a graduate of City University, Bellevue, Washington, and the Defense Information School, Fort Benjamin Harrison, Indiana. In 2002, he received his Accreditation in Public Relations from the Universal Accreditation Board of the Public Relations Society of America.

Management Initiatives

Developments since the City issued the 2015 Bonds include:

- Completed construction on the Western Branch Dam project. The $22 million project included improving the existing concrete dam spillway and constructing an emergency spillway to ensure compliance with new dam safety regulations.

- Continued CIP program to replace aging infrastructure in the City. During Fiscal Years 2016 and 2017, the Engineering Division received bids for approximately $57 million and replaced approximately 65,000 feet of water mains and 69,000 feet of sewer mains.

- During Fiscal Years 2015 and 2017, the Department saved approximately $340,000 in energy costs through EnergyConnect program to curtail electricity use during high-demand periods.

- Completed a $24.4 million renovation to the 37th Street water treatment plant that included installation of deep bed gravity filters, intermediate pump station and ultra-violet disinfection system, conversion of existing clear wells to post-sedimentation storage and replacement of the rapid-mix facilities.

- The Department completed construction at both water treatment plants on flood protection structures to prevent critical systems from being inundated by sea-level rise and storms up to a Category 3 hurricane.

- Continued to upgrade Water Production Facilities at the Moores Bridges water treatment plant which included:

    - Replacement of Tank ($7.1 million)
    - Facility improvements, including flood-proofing of various structures ($1.32 million)
    - Development of an asset management plan for water treatment plant assets

- The Department completed a $3.9 million replacement of the 36-inch raw water main under the Western Branch of the Elizabeth River.

- The Department completed neighborhood water and sewer replacement projects in Fairmount Park, Bruce's Park, Barraud Park, Wards Corner, Bayview, Titustown and East Ocean View.

THE SYSTEM

History and Overview

The City developed a surface water supply network starting with the use of a spring near Main Street in the late 1600s, through the development of an in-town lake system in the late 1800s, to the development of Lake Prince and Lake Burnt Mills in the City of Suffolk, Virginia ("Suffolk"), and the County of Isle of Wight, Virginia ("Isle of Wight"), in 1918 and the Western Branch Reservoir in Suffolk in 1962. In the 1940s through the 1960s the System expanded, and the Blackwater and Nottoway River intakes in the County of Southampton, Virginia ("Southampton"), were added. The existing surface water supply is sufficient to meet the 50-year projected water needs of Norfolk's residents and businesses and all current contract and non-contract wholesale requirements.

In order to process water, two water treatment plants have been constructed and maintained. See "THE SYSTEM – Water Treatment Plants" below. The Moores Bridges WTP, constructed in the late 1890s, currently treats all public water consumed in the City of Virginia Beach, Virginia ("Virginia Beach"), serves a portion of the City of Chesapeake, Virginia ("Chesapeake"), and treats and supplies portions of the water consumed in the City. The 37th Street WTP, originally put into service in the 1920s, supplies water to the remainder of the City. Both treatment plants serve the United States Navy.

Over time, the System has developed and expanded into the major regional provider of water for South Hampton Roads, currently serving an area encompassing a population of approximately 1.1 million, or approximately 12% of the population of the Commonwealth.

The first transmission line to Virginia Beach was installed in 1924, and the City has provided water to its neighbor ever since through long-term water supply contracts. A water services contract provides for the System's wheeling and treating of Virginia Beach raw water, either from Lake Gaston or Stumpy Lake, through Fiscal Year 2030. Additionally, the Navy and Chesapeake are long-standing wholesale treated water customers. Although the City currently has no separate water supply contract with Chesapeake, the City sells water to Chesapeake at a rate of $6.75 per 1,000 gallons which increases by 3.5% in subsequent fiscal years. Starting on July 1, 2006, the City also began selling raw water to Chesapeake. See "THE SYSTEM – Wholesale Contracts" below and "Appendix E – SUMMARY OF WHOLESALE CONTRACTS" hereto for further discussion of relationships with the City of Portsmouth, Virginia ("Portsmouth"), Chesapeake, Virginia Beach, the Western Tidewater Water Authority (serving the City of Suffolk and Isle of Wight County) (the "WTWA") and the United States Navy. The City also provides raw water to a U.S. military facility in Portsmouth.

Water Supply

The System receives water from a series of eight City-owned water supply reservoirs, which are located as follows: three in Suffolk and Isle of Wight (which collectively are known as the "Western Reservoir System"), three in Virginia Beach, and two in Norfolk (which collectively are known as the "In-Town Reservoirs"). The System's current raw water storage capacity is 15.2 billion gallons. These reservoirs are supplemented by two river intakes at the Blackwater and Nottoway Rivers and four ground water wells owned by the City that are available in times of shortages.

As more fully discussed in "THE SYSTEM – Wholesale Contracts" below and in "Appendix E – SUMMARY OF WHOLESALE CONTRACTS" hereto, the City and Virginia Beach entered into the Water Services Contract, as hereinafter defined, to provide for the treatment and delivery of raw water supplied by the City to Virginia Beach, whether from Lake Gaston or Stumpy Lake, up to the contract maximum limit of 45.0 mgd, or 46.8 mgd upon request from Virginia Beach and approval from Norfolk. Under the utility basis of cost recovery for this Contract, Virginia Beach is paying the City its proportionate share of annual operation and maintenance expense, depreciation, and return on specific System facilities used by the City to provide service to Virginia Beach. Such facilities include several expansion and improvement projects to increase the System's capacity to receive Lake Gaston water for treatment at the Moores Bridges WTP; improvements to master water meters; construction of a raw water pumping station, a raw water booster pumping station and a second high service pumping station at the Moores Bridges WTP; construction of raw water and treated water transmission mains; and hydraulic improvements at the Moores Bridges

WTP, including improvements to flash mixers, sedimentation basin, filters, plant laboratory, maintenance facilities and administrative offices.

On April 28, 1995, the City commenced the System improvements necessary to treat the Lake Gaston water after the City was requested to do so by Virginia Beach. Under the terms of the Water Services Contract, Virginia Beach is obligated to pay the City for all costs so incurred irrespective of Virginia Beach's ability to continue to provide Lake Gaston water.

Regional Water Requirements. The Moores Bridges WTP was expanded to provide for the treatment of up to 45 mgd of raw water that Virginia Beach receives from the Lake Gaston Reservoir. Norfolk is treating this water under a water services contract that went into effect in Fiscal Year 1998. This released 32 mgd of raw water from the Norfolk System that was being sold to Virginia Beach under the then existing water supply contract. The sale of 7 mgd of raw water under the City's wholesale raw water contract with Chesapeake began July 1, 2006. On September 29, 2009, the City entered into a 40-year raw water sales agreement with the WTWA to furnish a minimum of 3 mgd and gradually increasing to 15 mgd by 2038. Norfolk believes that continued growth in the South Hampton Roads area, including Virginia Beach, will generate a demand for this water.

Water Treatment Plants

The City owns and, through the Department, operates two major water treatment plants, the Moores Bridges WTP and the 37th Street WTP. The Moores Bridges WTP, with a rated capacity of 108 mgd (maximum day), provides finished water primarily to the eastern two-thirds of the City and Virginia Beach. The 37th Street WTP, with a rated capacity of 28 mgd (maximum day), provides finished water primarily to the western one-third of the City. Flow from both treatment plants serves the Navy facilities in Norfolk and the Moores Bridges WTP serves the urban northeastern section of Chesapeake.

Hampton Roads Sanitation District presented the Moores Bridges WTP and the 37th Street WTP with the 2016 and 2017 Gold Pre-Treatment Awards for excellent compliance with all the regulations associated with the Department's discharge permits. Both plants also received the Gold awards in FY 2017 from the Virginia Water Environment Association for perfect compliance with all Department's pretreatment discharge permit requirements. For FY 2016 and 2017 the Moores Bridges WTP received a Bronze Water Treatment Plant Performance Award for excellence in granular media filtration from the Virginia Department of Health for greatly exceeding Safe Drinking Water Act minimum filtered water quality standards.

Water Distribution and Storage Facilities

The System's distribution facilities within Norfolk include two ground level storage tanks with pumping stations, two elevated water storage tanks, approximately 20,939 water valves and approximately 4,702 hydrants. Treated water is distributed throughout the City, to the city limits of Virginia Beach and Chesapeake, and to the gates of the Norfolk Navy facilities by more than 800 miles of water mains. For Fiscal Year 2017, peak-day water production was 72.2 mgd and average day production was approximately 60.1 mgd. Average unaccounted-for treated and raw water was approximately 6.22 mgd. According to the AWWA, the optimum unaccounted-for water level for efficient distribution systems should be less than 10% of volume of water produced. Nationwide, AWWA reports that water utilities average about 15% unaccounted-for water. For Fiscal Year 2017, the System's unaccounted-for water level was 10.4%, which is near the AWWA's acceptable levels of 10%.

Permits

The City has obtained all governmental permits, licenses, registrations, certificates, authorizations and approvals currently required for the City's ownership and operation of the Water System and is aware of no reason why any such governmental permits, licenses, registrations, certificates, authorizations and approvals to be required in the future cannot be obtained as needed.

Mandatory Connection

Norfolk is a mature city, the land area of which is almost completely developed and served by the Water System's retail distribution facilities. The City Code requires the owner or tenant of any improved piece of property located within the City and bordering upon a street or alley along which a public water line has been laid to connect that same property with such public water supply line and makes it unlawful to use private wells or other alternative facilities where City water lines are available for connection thereto; provided, however, that owners or tenants of residences connected to such lines may use alternative water sources for residential heating and cooling purposes, irrigation and for maintaining residential and related personal property normally kept outdoors.

Customer Base

As of June 30, 2017, the Water System provides potable water to approximately 65,673 active Norfolk retail service customers (i.e. accounts) and wholesale service to the United States Navy, Virginia Beach, Chesapeake, Portsmouth and the WTWA. Population in the area served by the Water System totals approximately 1.1 million people. The average annual daily amount of finished water pumped for Fiscal Year 2017 was 60.1 mgd, including approximately 6.22 mgd of unaccounted-for water and 0.4 mgd of water used for such purposes as street cleaning, firefighting, System flushing and treatment plant usage.

Table 1
Average Daily Metered Consumption
Fiscal Year 2017

	Metered Consumption (mgd)	Percent of Total
Norfolk Retail	15.7	29.09%
Virginia Beach	31.5	58.48
Navy	4.6	8.45
Chesapeake	2.1	3.98
Total	53.9	100.00%

Source: Department of Utilities.

Table 2 provides data on the System's ten largest retail customers for Fiscal Year 2017.

Table 2
Ten Largest Retail Customers
Fiscal Year 2017

Retail Customer	Annual Water Consumption (1,000 gallons)	Annual Water Consumption as % of Total Consumption (1,000 gallons)
Norfolk Redevelopment and Housing Authority	309,694	1.58%
Old Dominion University	108,789	0.55
Sentara Norfolk General Hospital	99,595	0.51
BAE Systems	86,255	0.44
Norfolk State University	63,051	0.32
S.L. Nusbaum (Property Management)	55,557	0.28
Virginia International Terminal	46,251	0.24
Bon Secours DePaul Medical Center	45,469	0.23
Sentara Leigh Hospital	37,825	0.19
Metro Machine Corp	37,048	0.19
Total	889,533	4.53%

Source: Department of Utilities.

The ten largest retail customers together represent less than 5.0% of total water consumption, and no single retail customer represents more than 1.6% of total consumption.

Wholesale Contracts

The City maintains wholesale contracts or water service agreements with Chesapeake, Virginia Beach, Portsmouth, the Navy and the WTWA. These contracts and agreements set forth the amount of water to be sold, rate setting procedures, metering points, dispute resolution and other matters.

The descriptions of the contracts and agreements set forth below are brief outlines or summaries of certain provisions. For a more detailed description of the contracts and agreements see "Appendix E – SUMMARY OF WHOLESALE CONTRACTS" hereto. The outlines and summaries set forth above and in Appendix E do not purport to be complete, and reference should be made to each respective contract or agreement. Copies of the contracts and agreements may be obtained from the City for a full and complete statement of their provisions.

City of Virginia Beach. On July 14, 1993, the City entered into a water sales contract (the "Water Sales Contract") and a water services contract (the "Original Water Services Contract") with Virginia Beach. The Water Sales Contract served as an interim arrangement for the sale of surplus System water to Virginia Beach pending completion of the Lake Gaston Project. Beginning on January 1998, the Original Water Services Contract provided for the City's treatment and delivery of potable Lake Gaston water to Virginia Beach now that the Lake Gaston Project is completed. In 2001, the Original Water Services Contract was amended and restated (as amended and restated, the "Water Services Contract"). As of June 2004, the Water Services Contract covers the use of Virginia Beach's Stumpy Lake raw water source in conjunction with Lake Gaston water.

The Water Services Contract is a long-term contract (effective through June 30, 2030) that requires the City to receive, convey, treat and deliver to Virginia Beach up to an average of 45 mgd, or 46.8 mgd upon Virginia Beach's request and Norfolk's approval, of finished water to be provided from Virginia Beach's two raw water sources. The Water Services Contract establishes engineering, water quality and operational standards for the City to meet as it provides service to Virginia Beach. Accordingly, certain components of the System, including raw water storage, raw water pumping stations and transmission lines, water treatment plants and treated water storage, and finished water pumping and transmission facilities, will be utilized to provide treated water to Virginia Beach. The Water Services

Contract also provides that Virginia Beach will pay its proportionate share of the capital costs of the System irrespective of Virginia Beach's ability to provide raw water.

Certain components of the payments required by the Water Services Contract are not related to actual water usage. All payments by Virginia Beach under the Water Services Contract are secured solely by revenues received by Virginia Beach from charges paid by users of its water and sewer system. The Water Services Contract requires that such payments be designated by Virginia Beach as operating expenses of its water and sewer system and, as such, are payable ahead of debt service on future general obligation bonds and revenue bonds paid from Virginia Beach water and sewer system revenues. The Water Services Contract may be terminated by the City or by Virginia Beach upon the occurrence of various events.

The City anticipates entering into negotiations with Virginia Beach to extend the term of the Water Services Contract before the end of Fiscal Year 2019. There can be no assurances on the terms and conditions of any extensions to the Water Services Contract.

City of Chesapeake. The City sells Chesapeake wholesale finished water at various delivery points for service to the northeastern section of Chesapeake. Sales in Fiscal Year 2017 averaged 2.14 mgd which represents approximately 3.97% of the System's total metered water consumption. Rates are set by ordinance of the City Council.

In December 2002, the City entered into a raw water sales contract with Chesapeake for the sale of a portion of the City's surplus raw water to Chesapeake. The contract start-up date was July 1, 2006, and the term is through December 31, 2042. The contract specifies the terms and conditions of the sale, rates, termination provisions and dispute resolution. This is a "take or pay" contract for 7 mgd. Raw water sales averaged 7.06 mgd in Fiscal Year 2017. In the contract, the City agrees to sell and deliver to Chesapeake and Chesapeake agrees to accept a targeted amount of raw water transmitted to the extent possible at a uniform flow rate.

The current water rate is $1.29 per thousand gallons of surplus raw water sold. Each July 1, the then existing water rate shall be adjusted based on the change in the Consumer Price Index, but in no instance shall the water rate decrease. Chesapeake began making monthly payments for the metered amount of surplus raw water delivered on August 1, 2006.

City of Portsmouth. In 2002, the City entered into a contract with Portsmouth for the sale of emergency raw water. Portsmouth has constructed the necessary improvements to convey the raw water to its treatment facility. According to the contract, the City shall endeavor to deliver and sell to Portsmouth up to 10 mgd of temporary surplus raw water. The current water rate is $1.29 per thousand gallons of surplus raw water sold. There was no emergency raw water sold to Portsmouth in fiscal year 2017.

United States Navy. The City has a long-standing history of providing water to the United States Navy ("Navy") on a wholesale basis. In 1981, the City entered into a utility service contract for water service with the Navy for the delivery of water to the gates of the various Navy installations located in the City and outside the City. The contract was modified effective July 1, 2003, to establish treated water rates applicable to the naval facilities located in Norfolk and Virginia Beach. Effective July 1, 2013, a City ordinance was adopted that charges all military users (including the Navy) a water rate that is equivalent to the Norfolk retail rate plus 10% (so the Navy's current rate is $5.43/Ccf). Sales to the Navy averaged 4.55 mgd for Fiscal Year 2017, which represents approximately 8.46% of the total metered water consumption of the Water System.

Western Tidewater Water Authority. In Fiscal Year 2009, the City entered into a "take or pay" agreement with the WTWA, with a required minimum volume purchase. The agreement expires June 30, 2048. The ability to deliver water from the Western Branch Pump Station was made available to WTWA in May 2014.

The Service Area

The System's current service area covers approximately 334 square miles and includes the City, Virginia Beach, the urban northeastern section of Chesapeake as well as the localities included within the WTWA (Suffolk and Isle of Wight), as well as naval installations in the City, Virginia Beach and Portsmouth. This service area is part of what is commonly known as South Hampton Roads. These jurisdictions vary greatly in population and character. Virginia Beach and the City have the first and second largest populations of any cities in the Commonwealth, respectively. Chesapeake, currently the third largest city in the Commonwealth and has significant land available for residential and commercial development. Ranked by geographical size, Chesapeake is the second largest city in the Commonwealth and Virginia Beach is third. The City is the most densely populated of the three communities and has extensive waterfront development and the region's central business district. See "Appendix D – CERTAIN INFORMATION CONCERNING THE CITY" hereto.

Table 3 summarizes population trends from 1980 through 2017.

Table 3
Population
1980 – 2017

Area	1980	1990	2000	2010	2017
Norfolk	266,979	261,250	234,463	242,803	246,256
Virginia Beach	262,199	393,689	425,257	437,994	454,448
Chesapeake	114,486	151,982	199,184	222,209	242,655
Hampton Roads MSA	1,160,311	1,430,974	1,533,739	1,648,136	1,729,326
Commonwealth	5,346,279	6,189,197	7,078,515	8,001,024	8,470,020
United States	226,504,825	249,632,692	281,421,906	308,745,538	325,719,178

Sources: U.S. Bureau of the Census and the Weldon Cooper Center for Public Services, University of Virginia (the "Weldon Cooper Center").

Table 4 provides per capita income comparisons from 2007 through 2016.

Table 4
City of Norfolk, Virginia
Per Capita Personal Income Comparisons
2007 – 2016

Calendar Year	City	Hampton Roads MSA	Virginia	U.S.
2007	$35,075	$39,660	$43,927	$39,804
2008	35,806	40,814	44,901	40,873
2009	35,514	40,613	44,056	39,379
2010	36,061	41,220	44,836	40,144
2011	37,754	43,179	47,076	42,332
2012	38,762	44,553	48,715	44,200
2013	39,009	44,756	48,838	44,765
2014	37,052	45,276	50,345	46,392
2015	38,676	46,400	52,052	48,112
2016	38,484	47,019	52,957	49,246

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Information System. 2016 is the most recent year for which data is available.

The City has the largest concentration of naval installations in the world. These installations include (i) the Norfolk Naval Base which is the home port for many ships and is one of only two Navy ports on the east coast that can accommodate aircraft carriers; (ii) the Supreme Allied Atlantic Command of the North American Treaty Organization ("NATO"), which is the only NATO facility in the United States; (iii) the headquarters of the Navy's Atlantic Fleet; (iv) the Norfolk Air Station and (v) several other major Navy commands. The Norfolk Naval Base, located in the City along the Chesapeake Bay, has been a major military installation since World War I. Hampton Roads is the largest center of Coast Guard units in the world with the Atlantic Area Command and Maritime Defense Zone Atlantic in Portsmouth and its Maintenance & Logistic Command Atlantic headquarters in downtown Norfolk.

See "Appendix D – THE CITY OF NORFOLK – Economic and Demographic Factors – Military" for a discussion of the military's impact on the City.

Annual employment figures and unemployment rates are shown in Table 5 and Table 6, respectively.

Table 5
Employment
2014 – 2018

Year	Norfolk	Virginia Beach	Chesapeake
2014	97,579	217,374	117,979
2015	104,221	218,687	110,892
2016	104,850	219,775	111,486
2017	103,476	217,052	110,007
2018(1)	104,752	220,517	112,984

Source: U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics, Virginia Employment Commission.
Note: (1) As of January 2018.

Table 6
Unemployment Rates
2014 – 2018

Year	Norfolk	Virginia Beach	Chesapeake	Hampton Roads MSA	Virginia	U.S.
2014	5.9%	4.4%	4.5%	5.0%	4.5%	5.4%
2015	5.6	4.3	4.5	4.6	4.5	5.3
2016	5.2	3.9	4.3	4.5	4.0	4.9
2017	4.3	3.3	3.5	3.9	3.4	3.9
2018(1)	4.4	3.6	3.5	4.0	3.7	4.1

Source: U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics, Virginia Employment Commission.
Note: (1) As of January 2018.

CAPITAL IMPROVEMENT PROGRAM

In Fiscal Year 2004, the City embarked on a water system rehabilitation and replacement program to upgrade certain aging infrastructure components of the Water System. The City Council approved Ordinance Number 41,047 on May 20, 2003, which provided a series of three $0.33 per 1,000 gallon rate increases for Fiscal Years 2004 through 2006, and annual increases of 3.50% each July 1 thereafter, until amended. This series of gradual and predictable finished water retail rate adjustments position the System to support this program.

The City annually prepares a five-year CIP for the System incorporating all known capital costs over that period. Future year projects in the CIP are considered for planning purposes only until funds are provided and may be modified, at any time, by the City Council. These projects are classified in the following categories: (i) treatment plant renovations and upgrades; (ii) water distribution system improvements; (iii) reservoir-related improvements; (iv) upgrades to the billing system; and (v) water meter replacement. The anticipated timing of project costs associated with the current CIP is shown in Table 7.

Table 7
Capital Improvement Plan
(Fiscal Year Ending June 30)

	Approved	Planned				
	2018	2019	2020	2021	2022	Total
Comply with Safe Drinking Water Act Amendments	$300,000	$1,300,000	$500,000	$300,000	$300,000	$2,700,000
Design and Construct 37th Street Water Treatment Plant	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	12,500,000
Implement Meter Change-Out Program	320,000	200,000	370,000	3,250,000	10,320,000	14,460,000
Improve Water Pipeline Infrastructure	11,000,000	10,040,000	6,600,000	7,000,000	7,000,000	41,640,000
Rehabilitate Reservoirs System-wide	3,733,333	1,183,333	1,853,334	550,000	550,000	7,870,000
Upgrade Moores Bridges Water Treatment Plant	8,500,000	8,500,000	8,500,000	8,500,000	8,500,000	42,500,000
Upgrade Northstar Billing System	50,000	2,000,000	400,000	50,000	-	2,500,000
Total	$26,403,333	$25,723,333	$20,723,334	$22,150,000	$29,170,000	$124,170,000

Source: City of Norfolk, Virginia, Fiscal Year 2018 Approved Capital Improvement Plan.

The major near-term projects consist of replacement of raw water transmission and finished water distribution pipelines and upgrades to the Moores Bridges Water Treatment Plant. These improvements will be followed in subsequent years by construction of a new finished water storage tank in the distribution system, replacement of distribution system pipelines, and renovation/structural improvements of two raw water pump stations. These improvements will allow the City to continue to provide continuous operation of the System and meet all regulatory requirements.

Norfolk's Water System as it exists can be expected to provide adequate capacity to meet demand for the foreseeable future. Norfolk's treated water currently meets all physical, chemical, radiological and bacteriological water quality standards established by Federal and State regulations. The Department of Utilities actively plans and implements improvements to Norfolk's water treatment facilities to meet Safe Drinking Water Act regulations. The City has initiated projects to upgrade dated facilities and improve the quality and reliability of the treatment process. Management believes the CIP expenditure reasonably addresses current federal and state regulations regarding safe drinking water, dam safety and environmental protection. While there are some potential contaminants that may be incorporated into future Safe Drinking Water Act amendments, there are no pending regulations that will appear to impact the improvements planned in the five-year CIP.

Operation of the System requires compliance with environmental laws and regulations. Future legislative and regulatory proposals applicable to the System could result in increased capital or operating costs beyond those currently projected by the City.

Proceeds from the 2018 Bonds, together with other available funds, are expected to pay the cash flow requirements of CIP and current construction-work-in-progress project costs to be incurred through Fiscal Year 2019.

The City expects to issue Additional Bonds under the Indenture in Fiscal Year 2020 to finance portions of the remaining cash flow of project costs in the CIP and construction-work-in-progress. The City intends to pay for all future System capital costs from the Revenues of the System and proceeds of Bonds.

The estimated project costs indicated above are based upon the City's assumptions of future events and existing practices which are subject to revision as actual water utility operating results, regulatory requirements and City policy changes dictate.

Protected Self-Insurance Program

The City, including the System, are exposed to various risks of losses related to torts; theft and destruction of assets; errors and omissions; injuries to employees; and natural disasters. On July 11, 1978, the City established a protected Self-Insurance Program Fund, pursuant to an ordinance adopted by the City Council, to cover itself from these risks of losses. The program provides for the payment of claims liabilities, property losses and related expenses covered by a combination of purchased insurance policies and self-insurance plans. The total of insurance premiums, self-insurance claims and related expense payments made during Fiscal Year 2017 was $8,844,802.

The City currently reports all these activities as part of the risk management function in the general government section of the General Fund. Claims expenditures and liabilities are reported when it is probable that a loss has occurred and the amount of that loss can be reasonably estimated. At June 30, 2017, these liabilities were $31,918,233 of which $4,491,003 represents the current portion anticipated to be paid within a year. Estimated liabilities for Fiscal Year 2017 were determined by an independent actuary.

Changes in the City's claims liability amount in the Fiscal Years 2013 through 2017 are as follows:

Fiscal Year	Unpaid Claims Beginning Balance	Claims Incurred Estimated	Claims Paid	Ending Balance
2013	$31,400,391	$4,300,564	$4,863,716	$30,837,179
2014	30,837,239	5,527,877	7,309,828	29,055,288
2015	29,055,228	5,887,750	5,466,609	29,476,369
2016	29,476,429	6,855,246	7,035,040	29,296,575
2017	29,296,575	8,420,622	5,798,964	31,918,233

Sources: City of Norfolk, Virginia, Comprehensive Annual Financial Report, Fiscal Year Ended June 30, 2013, through 2017.

FINANCIAL MANAGEMENT

Overview

On July 1, 1979, the City Council established the Water Utility Fund (the "Fund") as a distinct enterprise fund of the City to account for all of the financial activity related to providing water services to its customers. The Fund is operated on a self-supporting basis.

Since its inception, regular transfers have been made from the Fund to the City's general fund for payments in lieu of taxes and as a return on the City's investment in the System. Additionally, transfers have been made to pay all debt service on general obligation bonds issued by the City to pay for System improvements. The Fund is reported on an accrual basis of accounting. Included in Appendix B hereto are the audited financial statements for the Fund for Fiscal Year 2017.

Rate Regulation

The power of the City to fix, charge and collect rates, fees and other charges for the use of and for the services furnished by the System is not subject to the regulatory jurisdiction of the State Corporation Commission of Virginia or any other federal, regional, state or local regulatory body. Subject to existing contractual commitments, the City has sole and exclusive authority over such rates, fees and other charges.

Water Rates

Retail rate recommendations are developed prior to the City's budgetary process. Retail rates are set by City Council. Formula-driven wholesale rate revisions are not submitted annually for City Council approval, as they were part of the original contract approval. The Department uses a retail rate structure comprised of a uniform rate per thousand gallons, with no quantity discount or lifeline rate. A historical summary of the City's water rates is shown in Table 8.

Norfolk's Retail Rate structure consists of a uniform commodity rate and a monthly water service charge (discontinued effective July 1, 2015). For Fiscal Year 2018, which began July 1, 2017, the Water Rate is $4.94 per Ccf. The monthly Water Account Service Charge of $1.00 was charged through Fiscal Year 2015. Norfolk also charges for fire protection, with rates that vary by the size of connection.

Table 8
Summary of Historical Water Rates
Rates Per 100 Cubic Feet

Fiscal Year	Water	% Change
2008	$3.49	3.6%
2009	3.61	3.4
2010	3.74	3.6
2011	3.87	3.5
2012	4.01	3.6
2013	4.15	3.5
2014	4.30	3.5
2015	4.45	3.5
2016	4.61	3.6
2017	4.77	3.5
10-Year Average:	$4.10	3.5%

Source: Department of Utilities.

The System's retail customers' average annual cost for Fiscal Years 2013 through 2017 are shown in Table 9 for ease of comparison with wholesale customers' average annual costs during the same period shown in Tables 10, 11 and 12.

Table 9
Retail Customers' Average Annual Costs
Norfolk Retail
2013 – 2017

Fiscal Year	Revenue	Volume (Mgal[1])	Average Cost ($/Mgal[1])
2013	$33,813,000	6,134,000	$5.51
2014	34,920,000	6,092,000	5.73
2015	35,846,000	6,136,000	5.84
2016	35,287,824	5,769,377	6.12
2017	36,212,701	5,716,954	6.33

Source: Department of Utilities.
Note: (1) "Mgal" means 1,000 gallons.

The rates from the wholesale contract with Virginia Beach are formula driven based on projected operating and capital cash flow expenditures for two years. Virginia Beach's bills reflect a three-part rate structure. Two parts of the rate structure are fixed monthly charges which recover proportional share of costs for system capacity designed to serve, and used by, Virginia Beach and for non-variable operation and maintenance costs. The third part of the rate structure is a uniform rate which recovers Virginia Beach's proportional share of variable operation and maintenance costs based on current use. Chesapeake's single uniform rate is based on an equivalent retail rate that recovers costs associated with the City's retail service charge and uniform rate.

Table 10
Wholesale Customers' Average Annual Costs
Virginia Beach
2013 – 2017

Fiscal Year	Revenue	Volume (Mgal)	Average Cost ($/Mgal)
2013	$22,643,000	11,739,100	$1.93
2014	23,188,000	11,613,900	1.99
2015	23,771,000	11,614,000	2.11
2016	23,730,664	11,257,000	2.11
2017	24,721,565	11,263,480	2.15

Source: Department of Utilities.

Table 11
Wholesale Customers' Average Annual Costs
U.S. Navy, including Norfolk and Virginia Beach Facilities
2013 – 2017

Fiscal Year	Revenue	Volume (Mgal)	Average Cost ($/Mgal)
2013	$8,768,000	1,444,000	$6.07
2014	9,927,000	1,571,000	6.32
2015	12,017,000	1,838,000	6.54
2016	10,355,614	1,530,378	6.77
2017	11,709,968	1,671,696	7.00

Source: Department of Utilities.

Table 12
Wholesale Customers' Average Annual Costs
Chesapeake
2013 – 2017

Fiscal Year	Revenue	Volume (Mgal)	Average Cost ($/Mgal)
2013	$5,099,000	898,000	$5.68
2014	4,912,000	835,300	5.88
2015	5,009,000	823,800	6.08
2016	4,717,964	719,635	6.56
2017	5,100,111	780,704	6.53

Source: Department of Utilities.

As shown in Table 13, the System's charges compare favorably with other providers of water in the region.

Table 13
Select Water Charges in the Region
(as of July 1, 2017)

City	Monthly Water Charges for Median Household(1)(2)
Chesapeake	$37.56
Newport News	34.57
Norfolk	29.64
Portsmouth	27.40
Virginia Beach	24.20

Source: Department of Utilities.
Notes: (1) Based on estimated average consumption of 6 Ccf per month.
(2) Excludes utility taxes levied by the City.

Billing, Collections and Enforcement Procedures

The Department bills for water monthly using a billing and information system that combines account, work order, meter and customer service management. Effective May 1994, the Department implemented a joint billing program with HRSD, a political subdivision of the Commonwealth that provides wastewater treatment to the Hampton Roads region. This program has resulted in annual billing and collection efficiencies to the City and HRSD of approximately 99.5%.

Meters are read on a monthly basis. Billing data is transmitted to the Hampton Roads Utility Billing System, which is managed by HRSD, for the inclusion with HRSD's billing of wastewater treatment, resulting in bills mailed within two days from the bill file being created in Norfolk's billing system and sent electronically to HRSD's billing system. The Department uses estimated billing only in extraordinary circumstances.

The Department has a collection staff that actively pursues the collection of past due bills in coordination with the City's Law Department and HRSD. Extensive efforts are directed towards collection of delinquent accounts. Water customers are subject to having their water service discontinued if payments are delinquent by more than 45 days. Water service is restored when full payment is received or an acceptable payment plan is arranged. Delinquent bills are pursued with the use of property liens, payment arrangements and through the court system. Accounts are written off after they have been inactive for three years and collection efforts have not been successful. The Department participates in the State Debt Set-Off Program, which provides a way for the Department to have delinquent account balances, which contain the customer's social security number, withheld from the customer's Virginia State Income Tax refund or Virginia Lottery winnings. Write-offs must be approved by City Council. Historical write-offs of bad debt for Fiscal Years 2013 through 2017 are shown in Table 14.

Table 14
Water Utility Fund
Bad Debt Write-off
2013 – 2017

Fiscal Year	Years Written Off	Amount	Corresponding Billed Water Revenue[1]	% of Net Charges for Services
2013	2009	$423,466	$75,856,000	0.56%
2014	2010	237,140	78,300,000	0.30
2015	2011	268,770	80,573,611	0.33
2016	2012	295,896	78,148,051	0.38
2017	2013	267,526	76,392,882	0.35

Source: Department of Utilities.
Note: (1) Corresponding Billed Water Revenue relates to revenue billed for the years in which the accounts receivable originate.

Reserves Policy

The City believes for the Water System to operate effectively as a utility enterprise, sound financing dictates that it is both prudent and appropriate to provide an Operating Fund reserve to accommodate normal fluctuations in expenditures for utility operations and to provide a Repair and Replacement Reserve to permit immediate funding for unforeseeable emergency capital needs. These reserves are in addition to the normal flow of working capital funds. This practice is consistent with the requirements of the Indenture.

The Water Utility Fund is meeting or exceeding all requirements for various reserve funds.

- Operating Fund, to maintain a balance of one-sixth of each year's budgeted operating expenses excluding debt service, capitalized operation and maintenance expense, and payments to the General Fund. This equates to payment of O&M expenses as they are incurred, and maintaining approximately sixty days of budgeted O&M expenses as a working capital reserve. The balance of the Operating Fund at June 30, 2017, was $7,075,661.

- Repair and Replacement Reserve Fund, such amounts as may be determined by the City to establish, sustain or increase the reserve level from the initial $1,000,000 balance. The balance of the Repair and Replacement Reserve Fund at June 30, 2017, was $2,021,617.

- Rate Stabilization Fund, such amounts as may be necessary to accumulate the Rate Stabilization Requirement for use in mitigating impacts of projected future rate increases, and anticipated true-ups of wholesale customer revenues. The Rate Stabilization Requirement is $0; however, the balance of the Rate Stabilization Fund at June 30, 2017, was $2,021,617.

- General Reserve Fund, to use first to cure any deficit which may exist in the Operating Fund, the Bond Fund, the Parity Debt Service Fund, the Debt Service Reserve Fund, the Repair and

Replacement Fund and the Rate Stabilization Fund, and then for any lawful purpose the General Reserve Fund reflects quick available funds (current cash and short-term investments). The balance of the General Reserve Fund at June 30, 2017, was $63,727,083.

Budget Process

The Department prepares an annual budget for the Fund in conformity with the City's requirements and procedures for the ensuing Fiscal Year. An interactive process is used during this review, involving personnel from the Department of Finance and the Office of Budget and Strategic Planning.

The Fund is accounted for on a full accrual basis which recognizes and records expenses and business services when goods and services are received and revenues when earned. The budget is prepared on a cash basis and non-cash items such as depreciation are not included. The Fund is a self-supporting enterprise fund with no subsidy from the City's General Fund. All debt service on general obligation bonds issued to fund System improvements, a payment in lieu of taxes, a return on investment and indirect overhead are budgeted to be paid from the annual revenues of the Water Utility Fund.

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The Fund's annual budgets for Fiscal Year 2017 and Fiscal Year 2018 are shown in Table 15.

Table 15
Water Utility Fund
Annual Budget
(Fiscal Year Ending June 30)
(Cash Basis)

Revenue	**2017**	**2018**
Permits and Fees	$ 583,100	$ 553,700
Use of Money and Property	232,000	268,000
Charges for Services	81,997,036	84,668,062
Miscellaneous Revenue	186,900	186,900
Recovered Costs	1,338,000	1,338,000
Other Sources and Transfers In	17,995	17,995
Total Appropriations	$84,355,031	$87,032,657
Expenditures		
Personnel Services	$18,518,267	$19,008,363
Materials, Supplies & Repairs	10,958,740	10,914,747
Contractual Services	9,431,090	8,899,294
Equipment	285,970	298,970
Department Specific Appropriation	15,533,906	13,256,253
Debt Service/Transfers to CIP	29,627,058	34,655,030
Total Appropriations	$84,355,031	$87,032,657

Sources: City of Norfolk, Virginia, Approved Operating Budgets, Fiscal Years 2017 and 2018.

Results of Operations

Statements of Revenues, Expenses and Changes in Fund Net Position for the Fund have been compiled from the City's Comprehensive Annual Financial Report ("CAFR") for Fiscal Years 2013 through 2017 and appear in Table 16. The statements have been organized in such a manner as to facilitate year to year comparisons. In the opinion of the City, there has been no adverse change in the financial condition of the System since the date of the last audit (June 30, 2017).

Table 16
Water Utility Fund
Statement of Revenues, Expenses and Changes in Fund Net Position
(Accrual Basis)
(Fiscal Year Ended June 30)

	2013	2014	2015	2016	2017[1]
Operating Revenues					
Charges for Services	$76,392,882	$79,096,905	$82,995,624	$80,749,120	$84,529,095
Miscellaneous	3,564,166	2,872,023	2,407,760	2,103,584	2,068,617
Total Operating Revenues	79,957,048	81,968,928	85,403,384	82,852,704	86,597,712
Operating Expenses					
Personnel Services	14,364,816	14,844,295	15,016,520	15,214,640	15,257,947
Plant Operations	6,489,193	6,650,541	6,281,535	6,189,936	6,728,352
Chemicals	3,110,828	3,173,508	3,088,100	2,960,586	2,948,324
Provision of Bad Debts [1]	236,310	-	-	-	-
Depreciation	12,348,880	12,917,853	12,933,935	13,050,994	13,476,128
Retirement and OPEB Contribution	2,535,851	2,440,979	2,436,750	1,173,815	2,246,616
Administrative Expenses	1,663,129	1,376,142	1,160,321	1,076,264	1,717,336
Other	9,121,183	8,817,856	8,899,577	9,055,797	11,776,845
Total Operating Expenses	49,870,190	50,221,174	49,816,738	48,722,032	54,151,548
Operating Income	30,086,858	31,747,754	35,586,646	34,130,672	32,446,164
Non-operating Revenue (expenses):					
Interest Income	134,172	109,074	87,409	250,334	372,353
Intergovernmental Revenues	1,284,157	-	-	-	-
Interest Expense and Fiscal Charges	(11,010,925)	(11,328,582)	(9,625,656)	(10,730,787)	(10,317,548)
Gain (Loss) on Sale or Disposal of Fixed Assets	(34,521)	(126,337)	(15,660)	38,169	(866,553)
Total Non-operating Revenue (Expenses)	(9,627,117)	(11,345,845)	(9,553,907)	(10,442,284)	(10,811,748)
Net Income (Loss) before Contributions and Transfers	20,459,741	20,401,909	26,032,739	23,688,388	21,634,416
Capital Contribution	191,592	2,660,416	2,929,676	337,654	188,476
Transfer Out	(8,500,000)	(8,500,000)	(8,500,000)	(8,500,000)	(8,500,000)
Change in Net Assets	12,151,333	14,562,325	20,462,415	15,526,042	13,322,892
Total Net Assets – Beginning	211,635,496	223,786,829	235,353,203	245,039,026	260,565,068
Restated net position – Beginning[(2) (3)]	-	(2,995,952)	(10,776,592)	-	-
Total Net Assets – Ending	$223,786,829	$235,353,202	$245,039,026	$260,565,068	$273,887,960

Sources: City of Norfolk, Virginia, Comprehensive Annual Financial Reports, Fiscal Years Ended June 30, 2013, through 2017.

Notes:
(1) Provision for bad debt is netted to the revenue for Fiscal Year 2014. Fiscal Year 2014 beginning balance of the total net position is restated due to adoption of GASB 65.
(2) Restatement due to GASB 65 that required the disclosure of gain and loss on defeasance of deferred inflows and outflows.
(3) Restatement due to adoption of GASB 68 ($10,026,045) and transfer to Waste Management Fund ($750,547).

Management Discussion of Operating Results

The following discussion is based on operating budgets and historical operating results as shown in Tables 15 and 16, respectively. The revenues of the Fund have remained fairly stable over the past three years and total expenses of operating the System have remained fairly level over the last several years.

The financial data in this Official Statement is excerpted from the published audited Comprehensive Annual Financial Report (the "CAFR") for fiscal year ended June 30, 2017.

Fiscal Year 2017, operating revenues were $86.6 million or approximately 2.7% more than budgeted. Fiscal Year 2017 operating expenditures were $37.7 million or approximately 4% more than projected. The increases in operating costs were due largely to an increase in pension expense, unscheduled system repair work and repaving charges, increases in professional fees associated with capital improvement projects and increases in allocated City expenses.

Combining the higher than budgeted revenues and lower than budgeted expenditures, the Water Fund preliminarily expects to end Fiscal Year 2018 with a positive variance.

OPERATING RESULTS AND DEBT SERVICE COVERAGE

Table 17 includes a summary of the Water Fund's debt service coverage for Fiscal Years 2008 through 2017.

Table 17
Water Utility Fund
Debt Service Coverage
(Accrual Basis)

				Revenue Bonds Debt Service			
Fiscal Year	Revenues Available for Debt Service[1]	Operating Expenses Less Depreciation/ Amortization and PILOT[2]	Income Available for Debt Service	Principal	Interest	Total	Coverage
2008	$78,730,024	$37,026,528	$41,703,496	$7,665,000	$14,022,200	$21,687,200	1.92
2009	78,020,552	38,182,373	39,838,179	8,050,000	16,411,343	24,461,343	1.63
2010	82,470,020	34,567,741	47,902,279	9,420,000	15,929,680	25,349,680	1.89
2011	83,737,444	37,068,753	46,668,691	9,875,000	16,527,844	26,402,844	1.77
2012	81,295,219	34,667,524	46,627,695	11,285,000	11,184,363	22,469,363	2.08
2013	80,091,220	34,810,702	45,280,518	7,000,000	14,700,777	21,700,777	2.09
2014	82,078,002	34,466,877	47,611,125	7,250,000	15,630,219	22,880,219	2.08
2015	85,490,793	33,940,277	51,550,516	7,805,000	13,905,866	21,710,866	2.37
2016	83,103,038	32,726,204	50,376,834	8,750,000	16,612,870	25,362,870	1.99
2017	86,970,065	37,735,743	49,234,322	10,090,000	15,988,725	26,078,725	1.89

Source: Department of Utilities.
Notes: (1) Includes operating revenue plus interest income, net of interest capitalized.
(2) Includes operating expenses less depreciation, amortization and payment in lieu of taxes (PILOT).

PROJECTED OPERATING RESULTS

The projected financial ability of Norfolk's Water Fund revenue to meet annual expenditure requirements and maintain adequate fund balances for the next five years is summarized in Table 18. The table, which includes the Series 2018 Bonds and one additional bond issuance in Fiscal Year 2020 to fund the capital program, indicates that debt service coverage is projected to exceed the Revenue Covenant of the Master Indenture.

Projections of annual water sales revenue from existing rates, estimated additional revenues from planned automatic rate increases, other operating revenue and interest income, result in total available revenue ranges from $87.78 million in Fiscal Year 2018 to $99.72 million in Fiscal Year 2022. The City has historically reviewed and adjusted water rates annually, as necessary, to recover all costs of providing water service. An adopted City ordinance provides for an automatic increase of 3.5% annually in the Norfolk Retail rates. Table 18 shows revenue adjustments, which; (1) recognize rate making provisions in existing contracts between Norfolk and its wholesale customers; and, (2) reflect continued approval of Utilities' Retail rate increases of 3.5% through Fiscal Year 2022 as allowed by City ordinance.

Projections of Other Operating Revenue include the reimbursement to the Water Fund for administrative and engineering costs associated with the Wastewater System.

Table 18 assumes most Operating and Maintenance expenses grow at approximately 2.0% annually, while healthcare expenses reflect annual growth of 7.0%. Net Revenue reflects remaining revenue after deducting projected Operating and Maintenance expenses from total revenue.

Projected debt service requirements for Outstanding Senior Debt and the 2018 Series Bonds are also shown on Table 18. Projected annual coverage is shown to be equal to or greater than 1.73 times throughout the next five years, exceeding the minimum of 1.10 times required by the Master Indenture for Outstanding Senior Debt. The following table shows projected revenues and expenses for the Fiscal Years ending June 30, 2018 through June 30, 2022, inclusive.

Table 18
Projected Operating Results
Fiscal Year Ending June 30

Line No.	Description	Historical 2017	Projected 2018	2019	2020	2021	2022
		$	$	$	$	$	$
	Projected Operating Results						
	Revenue from Rates:						
1	Revenue from Existing Rates	84,529,000	85,373,000	86,415,000	86,767,000	86,767,000	87,118,000
2	Revenues from Increases [(1)]	0	751,000	3,343,000	5,671,000	8,195,000	10,952,000
3	Gross Water Sales Revenue	84,529,000	86,124,000	89,758,000	92,438,000	94,962,000	98,070,000
4	Rate Stabilization Fund Transfers (to)/from	0	0	0	0	0	0
5	Other Operating Revenue	2,069,000	1,789,000	1,789,000	1,789,000	1,789,000	1,789,000
6	Interest Income	372,000	245,000	260,000	269,000	278,000	289,000
7	Provision for Bad Debts [(2)]	0	(378,000)	(391,000)	(404,000)	(419,000)	(433,000)
8	**Total Revenue**	**86,970,000**	**87,780,000**	**91,416,000**	**94,092,000**	**96,610,000**	**99,715,000**
9	**Operation & Maintenance Expenses [(3)]**	**(37,736,000)**	**(38,477,000)**	**(39,235,000)**	**(40,012,000)**	**(40,810,000)**	**(41,628,000)**
10	**Net Revenue**	**49,234,000**	**49,303,000**	**52,181,000**	**54,080,000**	**55,800,000**	**58,087,000**
	Revenue Bond Debt Service						
11	Outstanding Bonds [(4)]	(26,079,000)	(28,237,000)	(28,614,000)	(27,554,000)	(28,956,000)	(29,354,000)
12	Planned Series 2018 Bonds [(5)]	0	0	(1,476,132)	(1,348,750)	(1,348,750)	(1,348,750)
13	Proposed Future Bonds [(5)]	0	0	0	(656,500)	(1,313,000)	(1,313,000)
14	**Total Revenue Bond Debt Service**	**(26,079,000)**	**(28,237,000)**	**(30,090,132)**	**(29,559,250)**	**(31,617,750)**	**(32,015,750)**
15	**Revenue Bond Debt Service Coverage**	**1.89**	**1.75**	**1.73**	**1.83**	**1.76**	**1.81**
16	**Net Available For Other Purposes**	**23,155,000**	**21,066,000**	**22,090,868**	**24,520,750**	**24,182,250**	**26,071,250**

Source: Black & Veatch.

Notes:
(1) City Ordinance provides for an increase of 3.5% annually in Norfolk Retail rates. Also includes projected increases in wholesale contracts, in accordance with individual contract terms, as well as the estimated reduction in Fiscal Year 2017 and forward for Virginia Beach Fixed Capacity Charge Revenue due to the true up adjustment.
(2) Provision for Bad Debts projected as 1% of retail revenue.
(3) Assumes a 2.0% yearly increase in Operating and Maintenance expenditures, aside from health benefits which are projected to grow at 6% annually.
(4) Outstanding debt takes into account the refunding accomplished by the 2017 Bonds.
(5) Assumes the following bond issuances; $27 million issued in Fiscal Year 2018 and $26 million issued in Fiscal Year 2020.

LEGAL MATTERS

Certain legal matters relating to the authorization and validity of the 2018 Bonds are subject to the approving opinion of McGuireWoods LLP, Richmond, Virginia, Bond Counsel, which will be in substantially the form of Appendix C to this Official Statement. Such opinion will be furnished at the expense of the City upon delivery of the 2018 Bonds. Bond Counsel has not prepared this Official Statement and has not verified its accuracy, completeness or fairness, and Bond Counsel's opinion will be limited to matters relating to the authorization and validity of the 2018 Bonds and to the exemption of interest thereon under present federal and Virginia income tax laws. Certain legal matters will be passed on for the City by the City Attorney.

TAX MATTERS

Opinion of Bond Counsel

Bond Counsel's opinion regarding the 2018 Bonds will state that, under current law and assuming the compliance with the Covenants, as hereinafter defined, by the City and certain other persons and entities, interest on the 2018 Bonds (including any accrued "original issue discount" properly allocable to the owners of the 2018 Bonds) (i) is excludable from the gross income of the owners of the 2018 Bonds for purposes of federal income taxation under Section 103 of the Code, and (ii) is not a specific item of tax preference for purposes of the federal alternative minimum tax imposed on individuals. See Appendix B for the form of the opinion of Bond Counsel for the 2018 Bonds.

Bond Counsel will express no opinion regarding other federal tax consequences arising with respect to the 2018 Bonds.

Bond Counsel's opinion speaks as of its date, is based on current legal authority and precedent, covers certain matters not directly addressed by such authority and precedent, and represents Bond Counsel's judgment as to the proper treatment of interest on 2018 Bonds for federal income tax purposes. Bond Counsel's opinion does not contain or provide any opinion or assurance regarding the future activities of the City or about the effect of future changes in the Code, the applicable regulations, the interpretation thereof or the enforcement thereof by the Internal Revenue Service (the "IRS"). The City has covenanted, however, to comply with the requirements of the Code.

Reliance and Assumptions; Effect of Certain Changes

As to questions of fact material to its opinion regarding the 2018 Bonds, Bond Counsel is relying upon and assuming the accuracy of certifications and representations of representatives of the City and other third parties, and public officials, which Bond Counsel has not independently verified.

In addition, Bond Counsel is assuming continuing compliance with the Covenants by the City and certain other persons and entities. The Code and the regulations promulgated thereunder contain a number of requirements that must be satisfied after the issuance of the 2018 Bonds in order for interest on the 2018 Bonds to be and remain excludable from gross income for purposes of federal income taxation. These requirements include, by way of example and not limitation, restrictions on the use, expenditure and investment of the proceeds of the 2018 Bonds and the use of the property financed or refinanced by the 2018 Bonds, limitations on the source of the payment of and the security for the 2018 Bonds, and the obligation to rebate certain excess earnings on the gross proceeds of the 2018 to the United States Department of the Treasury ("Treasury"). Prior to the issuance of the 2018 Bonds, the City will enter into a tax certificate for the 2018 Bonds (the "Tax Certificate") that contains covenants (the "Covenants") with which the City has agreed to comply. A failure to comply with the Covenants could cause interest on the 2018 Bonds to become includible in gross income for federal income tax purposes retroactively to their date of issue. In the event of noncompliance with the Covenants, the available enforcement remedies may be limited by applicable provisions of law and, therefore, may not be adequate to prevent interest on the 2018 Bonds from becoming includible in gross income for federal income tax purposes.

Bond Counsel has no responsibility to monitor compliance with the Covenants after the date of issue of the 2018 Bonds.

Certain requirements and procedures contained, incorporated or referred to in the Tax Certificate, including the Covenants, may be changed and certain actions may be taken or omitted under the circumstances and subject to the terms and conditions set forth in such document. Bond Counsel expresses no opinion concerning any effect on the excludability of interest on the 2018 Bonds from gross income for federal income tax purposes of any such subsequent change or action that may be made, taken or omitted upon the advice or approval of counsel other than Bond Counsel.

Certain Collateral Federal Tax Consequences

The following is a brief discussion of certain collateral federal income tax matters with respect to the 2018 Bonds. It does not purport to address all aspects of federal taxation that may be relevant to a particular owner thereof. Prospective purchasers of such 2018 Bonds, particularly those who may be subject to special rules, are advised to consult their own tax advisors regarding the federal tax consequences of owning or disposing of the 2018 Bonds.

Prospective purchasers of the 2018 Bonds should be aware that the ownership of tax-exempt obligations may result in collateral federal income tax consequences to certain taxpayers including, without limitation, financial institutions, certain insurance companies, certain corporations (including S corporations and foreign corporations), certain foreign corporations subject to the "branch profits tax," individual recipients of Social Security or Railroad Retirement benefits, taxpayers who may be deemed to have incurred or continued indebtedness to purchase or carry tax-exempt obligations and taxpayers attempting to qualify for the earned income tax credit.

In addition, prospective purchasers should be aware that the interest paid on, and the proceeds of the sale of, tax-exempt obligations, including the 2018 Bonds, are in many cases required to be reported to the IRS in a manner similar to interest paid on taxable obligations. Additionally, backup withholding may apply to any such payments made to any 2018 Bond owner who fails to provide an accurate Form W-9 Request for Taxpayer Identification Number and Certification, or a substantially identical form, or to any 2018 Bond owner who is notified by the IRS of a failure to report all interest and dividends required to be shown on federal income tax returns. The reporting and withholding requirements do not in and of themselves affect the excludability of such interest from gross income for federal income tax purposes or any other federal tax consequence of purchasing, holding or selling tax-exempt obligations.

Original Issue Discount

The "original issue discount" ("OID") on any 2018 Bond is the excess of such bond's stated redemption price at maturity (excluding certain "qualified stated interest" that is unconditionally payable at least annually at prescribed rates) over the issue price of such bond. The "issue price" of a bond is the initial offering price to the public at which price a substantial amount of such bonds of the same maturity was sold. The issue price for each maturity of the 2018 Bonds is expected to be the initial public offering price set forth on the inside front cover page of this Official Statement, but is subject to change based on actual sales. Accrued OID on the 2018 Bonds with OID (the "OID Bonds") is excludable from gross income for purposes of federal and Virginia income taxation. However, the portion of the OID that is deemed to have accrued to the owner of an OID Bond in each year may be included in determining the alternative minimum tax with respect to the 2018 Bonds and the distribution requirements of certain investment companies and may result in some of the collateral federal income tax consequences mentioned in the preceding subsection. Therefore, owners of OID Bonds should be aware that the accrual of OID in each year may result in alternative minimum tax liability, additional distribution requirements or other collateral federal and Virginia income tax consequences although the owner may not have received cash in such year.

OID is treated under Section 1288 of the Code as accruing under a constant yield method that takes into account compounding on a semiannual or more frequent basis. If an OID Bond is sold or otherwise disposed of between semiannual compounding dates, then the OID which would have accrued for that semiannual compounding period for federal income tax purposes is to be apportioned in equal amounts among the days in such compounding period.

In the case of an original owner of an OID Bond, the amount of OID that is treated as having accrued on such OID Bond is added to the owner's cost basis in determining, for federal income tax purposes, gain or loss upon its disposition (including its sale, redemption or payment at maturity). The amounts received upon such disposition that are attributable to accrued OID will be excluded from the gross income of the recipients for federal income tax purposes. The accrual of OID and its effect on the redemption, sale or other disposition of OID Bonds that are not purchased in the initial offering at the initial offering price may be determined according to rules that differ from those described above.

Prospective purchasers of OID Bonds should consult their own tax advisors with respect to the precise determination for federal income tax purposes of the OID accrued upon sale or redemption of such OID Bonds and with respect to state and local tax consequences of owning OID Bonds.

Bond Premium

In general, if an owner acquires a bond for a purchase price (excluding accrued interest) or otherwise at a tax basis that reflects a premium over the sum of all amounts payable on the bond after the acquisition date (excluding certain "qualified stated interest" that is unconditionally payable at least annually at prescribed rates), that premium constitutes "bond premium" on that bond (a "Premium Bond"). In general, under Section 171 of the Code, an owner of a Premium Bond must amortize the bond premium over the remaining term of the Premium Bond, based on the owner's yield over the remaining term of the Premium Bond, determined based on constant yield principles. An owner of a Premium Bond must amortize the bond premium by offsetting the qualified stated interest allocable to each interest accrual period under the owner's regular method of accounting against the bond premium allocable to that period. In the case of a tax-exempt Premium Bond, if the bond premium allocable to an accrual period exceeds the qualified stated interest allocable to that accrual period, the excess is a nondeductible loss. Under certain circumstances, the owner of a Premium Bond may realize a taxable gain upon disposition of the Premium Bond even though it is sold or redeemed for an amount less than or equal to the owner's original acquisition cost. Prospective purchasers of any Premium Bond should consult their own tax advisors regarding the treatment of bond premium for federal income tax purposes, including various special rules relating thereto, and state and local tax consequences, in connection with the acquisition, ownership, amortization of bond premium on, sale, exchange, or other disposition of such Premium Bond.

Effects of Future Enforcement, Regulatory and Legislative Actions

The IRS has established a program to audit tax-exempt obligations to determine whether the interest thereon is includible in gross income for federal income tax purposes. If the IRS does audit the 2018 Bonds, the IRS will, under its current procedures, treat the City as the taxpayer. As such, the beneficial owners of the 2018 Bonds, as applicable, will have only limited rights, if any, to participate in the audit or any administrative or judicial review or appeal thereof. Any action of the IRS, including but not limited to the selection of the 2018 Bonds for audit, or the course or result of such audit, or an audit of other obligations presenting similar tax issues, may affect the marketability or market value of the 2018 Bonds, as applicable.

Legislation affecting tax-exempt obligations is regularly considered by the U.S. Congress and various state legislatures. Such legislation may effect changes in federal or state income tax rates and the application of federal or state income tax laws (including the substitution of another type of tax), or may repeal or reduce the benefit of the excludability of interest on the tax-exempt obligations from gross income for federal or state income tax purposes. The Treasury and the IRS are continuously drafting regulations to interpret and apply the provisions of the Code and court proceedings may be filed the outcome of which could modify the federal or state tax treatment of tax-exempt obligations. There can be no assurance that legislation proposed or enacted after the date of issue of the 2018 Bonds, regulatory interpretation of the Code or actions by a court involving either the 2018 Bonds or other tax-exempt obligations will not have an adverse effect on the 2018 Bonds' federal or state tax status, marketability or market price or on the economic value of the tax-exempt status of the interest on the 2018 Bonds.

Prospective purchasers of the 2018 Bonds should consult their own tax advisors regarding the potential consequences of any such pending or proposed federal or state tax legislation, regulations or litigation, as to which Bond Counsel expresses no opinion.

Virginia Tax Matters

Bond Counsel's opinion also will state that, under current law, interest on the 2018 Bonds is excludable from the gross income of the owners thereof for purposes of income taxation by the Commonwealth. Bond Counsel will express no opinion regarding (i) other tax consequences arising with respect to the 2018 Bonds under the laws of the Commonwealth or (ii) any consequences arising with respect to the 2018 Bonds under the tax laws of any state or local jurisdiction other than the Commonwealth. Prospective purchasers of the 2018 Bonds should consult their own tax advisors regarding the tax status of interest on the 2018 Bonds in a particular state or local jurisdiction other than the Commonwealth.

PENDING LITIGATION

The City is involved from time to time in various legal actions some of which affect the System. In the opinion of the City Attorney, there is no litigation now pending or threatened to restrain or enjoin the issuance, sale, execution or delivery of the 2018 Bonds, or in any way contesting or affecting the validity of the 2018 Bonds, any proceeding of the City taken with respect to their issuance or sale, or the powers of the City with respect to the operation of the System including the City's ability to collect and apply Revenues of the System as set forth in the Indenture.

According to the City there is no litigation pending or, to its knowledge and belief, threatened which would have a material adverse effect on the operations or financial condition of the System.

BOND RATINGS

The 2018 Bonds have been rated AA+ by S&P Global Ratings ("S&P") and AA+ by Fitch Ratings ("Fitch").

Explanations of the significance of such ratings may be obtained from S&P and Fitch. The ratings are not a recommendation to buy, sell or hold the 2018 Bonds and should be evaluated independently.

There is no assurance that such ratings will not be withdrawn or revised downward by S&P or Fitch. Such action may have an adverse effect on the market price of the 2018 Bonds. The City has not undertaken any responsibility after the issuance of the 2018 Bonds to assure maintenance of the ratings or to oppose any such revision or withdrawal.

FINANCIAL STATEMENTS

The audited Fund financial statements with accompanying notes for the Fiscal Year 2017 is published, along with the accompanying report of the City's Independent Accountants, in Appendix B to this Official Statement. The City's Independent Accountants have not reviewed this Official Statement or any other matters related to the issuance of the 2018 Bonds.

FINANCIAL ADVISOR

The City has retained PFM Financial Advisors LLC, Arlington, Virginia ("PFM"), as financial advisor in connection with the issuance and sale of the 2018 Bonds. Although PFM has assisted in the preparation of this Official Statement, PFM is not obligated to undertake, and has not undertaken to make, an independent verification or to assume responsibility for the accuracy, completeness or fairness of the information contained in this Official Statement. PFM is an independent advisory firm and is not engaged in the business of underwriting, trading or distributing municipal securities or other public securities.

RELATIONSHIP OF PARTIES

McGuireWoods LLP, Richmond, Virginia, Bond Counsel, represents U.S. Bank National Association, the trustee, from time to time in unrelated matters.

SALE AT COMPETITIVE BIDDING

The 2018 Bonds were offered for sale at competitive bidding on March 13, 2018, and were awarded to Janney Montgomery Scott LLP (the "2018 Winning Bidder"). The 2018 Winning Bidder supplied the information as to the initial offering prices of the 2018 Bonds as set forth on the inside cover of this Official Statement. The 2018 Winning Bidder will be purchasing the 2018 Bonds at a purchase price equal to the aggregate original principal amount of the 2018 Bonds of $26,700,000.00, less a discount of $35,560.42, plus original issue premium of $4,304,171.50, resulting in a purchase price of $30,968,611.08.

CONTINUING DISCLOSURE

The City will execute and deliver for the benefit of the Bondholders a Continuing Disclosure Agreement, the form of which is set forth as Appendix F to this Official Statement, pursuant to which the City will covenant and agree, for the benefit of the Bondholders, to provide certain annual financial information and operating data, and notice of the events listed in Rule 15c2-12. As described in Appendix F, such undertakings require the City to provide only limited information at specified times.

The continuing obligation of the City to provide annual financial information and operating data, and notices referred to above, will terminate with respect to any 2018 Bond when such 2018 Bond is no longer outstanding. Any failure by the City to comply with the foregoing will not constitute a default with respect to the applicable 2018 Bonds under the Indenture or otherwise. Such a failure may adversely affect the transferability and liquidity of the 2018 Bonds and their market price.

See "Appendix F – FORM OF CONTINUING DISCLOSURE AGREEMENT" for the form of continuing disclosure agreement.

MISCELLANEOUS

This Official Statement and any advertisement of the 2018 Bonds are not to be construed as a contract with the purchasers of the 2018 Bonds. Any statement made in this Official Statement involving matters of opinion or of estimates, whether or not so expressly identified, are set forth as such and not as representations of fact, and no representation is made that any of the estimates will be realized. The City Council has by ordinance authorized the execution and delivery of this Official Statement on behalf of the City by the City Manager and the Director of Finance.

The references in this Official Statement to and summaries of federal, Commonwealth and City laws, including but not limited to the Constitution of the Commonwealth, the Code of Virginia, the City Charter and documents, agreements and court decisions are summaries of certain of their provisions. Such summaries do not purport to be complete and are qualified in their entirety by reference to such acts, laws, documents, agreements or decisions, copies of which are available for inspection during normal business hours at the office of the City Attorney.

Any question concerning the content of this Official Statement should be directed to the Director of Finance, 810 Union Street, City Hall Building, Suite 600, Norfolk, Virginia 23510, (757) 664-4346.

The execution and delivery of this Official Statement has been duly authorized by the City Council. The City deems this Official Statement final as of its date within the meaning of Rule 15c2-12.

CITY OF NORFOLK, VIRGINIA

/s/ Douglas L. Smith
City Manager

/s/ Christine Garczynski
Director of Finance

DEFINITIONS AND SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE

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DEFINITIONS AND SUMMARY
OF CERTAIN PROVISIONS OF THE INDENTURE

Definitions of Certain Terms

"Accreted Value" will have the meaning set forth in the Supplemental Indenture authorizing any Capital Appreciation Bonds.

"Act" means the Public Finance Act of 1991, Chapter 26 of Title 15.2, of the Code of Virginia of 1950, as amended.

"Additional Bonds" mean any Bonds other than the Outstanding Bonds or the 2018 Bonds.

"Annual Budget" means the budget referred to in the Master Indenture.

"Authorized City Representative" means any person or persons designated to act on behalf of the City by a certificate signed by its Director of Finance and filed with the Trustee.

"Average Interest Rate" means the average of the actual interest rates which were in effect (weighted according to the length of the period during which each such interest rate was in effect) for the most recent twelve-month period immediately preceding the date of calculation for which such information is available (or shorter period if such information is not available for a twelve-month period), except that with respect to new Variable Rate Indebtedness the interest rate for such Variable Rate Indebtedness for the initial interest rate period will be the initial rate at which such Variable Rate Indebtedness is issued and thereafter will be calculated as set forth above.

"Balloon Indebtedness" means any Indebtedness, including any Bond Anticipation Notes, 25% or more of the original principal amount of which matures or is subject to mandatory redemption during any consecutive twelve-month period, if the maturing principal amount is not required to be amortized below such percentage by mandatory redemption or prepayment before the twelve-month period.

"Bank" means (i) a bank or trust company that has a combined capital, surplus and undivided profits of not less than $50,000,000 or (ii) a subsidiary trust company with combined capital, surplus and undivided profits, together with that of its parent bank or bank holding company, as the case may be, of not less than $50,000,000; provided, however, that any such bank or trust company will have (or have a parent company which has) a long-term debt rating within one of the three highest categories by at least one of the Rating Agencies.

"Bond" or "Bonds" mean any bond or all of the bonds, as the case may be, issued pursuant to the Master Indenture and any Supplemental Indenture, but not including any Parity Indebtedness or Subordinate Debt or any bonds or other evidence of indebtedness of the City issued from time to time under any other indenture, trust agreement, ordinance, resolution or similar instrument.

"Bond Anticipation Notes" mean notes or other obligations issued in anticipation of the issuance of Bonds.

"Bond Counsel" means an attorney or a firm of attorneys (designated by the City) of nationally recognized standing in matters pertaining to the validity of and the tax-exempt nature of interest on bonds issued by states and their political subdivisions, duly admitted to the practice of law before the highest court of any state of the United States of America.

"Bond Debt Service" means for any period of twelve consecutive months the Debt Service Requirement with respect to any Bonds then Outstanding.

"Bond Fund" means the bond fund established under the Master Indenture.

"Business Day" means any day other than (i) a Saturday or Sunday, (ii) a day on which commercial banks in the Commonwealth, or the city in which the principal corporate trust office of the Trustee or the Paying Agent is located, are authorized by law to close, (iii) a day on which the New York Stock Exchange is closed, or (iv) such other days as may be specified in a Supplemental Indenture.

"Capital Appreciation Bonds" mean the Bonds in any Series designated as Capital Appreciation Bonds in the Supplemental Indenture authorizing the issuance of the Series.

"Capitalized Interest Account" means the Capitalized Interest Account of the Bond Fund.

"City" means the City of Norfolk, Virginia, a political subdivision of the Commonwealth.

"City Obligations" means for any Fiscal Year the amount budgeted to be paid to the general fund of the City for PILOT and ROI.

"Code" means the Internal Revenue Code of 1986, as amended, including applicable regulations and revenue rulings, and any successor codification.

"Commonwealth" means the Commonwealth of Virginia.

"Compounding Date" for Bonds of any Series will have the meaning set forth in the Supplemental Indenture authorizing the issuance of such Series.

"Consulting Engineer" means an independent engineering firm or individual engineer licensed to do business in Virginia and experienced with matters related to utilities similar to the System retained by the City as Consulting Engineer.

"Contracted Services" mean services rendered or facilities provided to the City in respect of the System or for the performance for or on behalf of the City of functions similar to those performed by the System, from a specific project, projects or systems, pursuant to a Service Contract, whether a financing lease, a service agreement or another arrangement.

"Cost" or "Cost of the Project" means all costs incurred by the City in connection with the acquisition, expansion, construction, improvement, renovation and equipping of the System or any Project comprising a portion of the System, as permitted by the Act, including, without limitation, the payment of costs of issuance of Bonds and the funding of such funds and accounts as provided in the Master Indenture or any Supplemental Indenture, the cost of all lands, properties, rights, easements, franchises and permits acquired, the cost of all machinery and equipment, amounts paid to purchase capacity or services from other entities which are required to be capitalized or which the City makes an election to capitalize, financing charges, initial credit enhancement charges, interest before and during construction of any Project and for up to one year after completion of construction of any Project, any amounts required to be rebated to the United States of America pursuant to Section 148(f) of the Code, any deposits to any bond interest and principal reserve accounts, the cost of engineering and legal services, plans, specifications, surveys, estimates of costs and of revenues, other expenses necessary or incident to determining the feasibility or practicability of any acquisition, improvement or construction, administrative expenses, working capital, the retirement of notes or other interim financing the proceeds of which were used to pay Costs, and such other expenses as may be necessary or incidental to the improvement of the System and placing it in operation.

"Cost of Contracted Services" means the payments to be made by the City for Contracted Services which may be allocated by the City between: (i) a Debt Service Component and (ii) an Operating Component. No designation or characterization of payments under a Service Contract will affect the City's right to make some other allocation of the payments for the purpose of the Master Indenture.

"Counsel" means such attorney or firm of attorneys selected or approved by the City who are duly admitted to practice law before the highest court of any state of the United States of America, none of whom is a full-time employee, member, director or officer of the City or a full-time employee or officer of the Trustee.

"Credit Facility" means a line of credit, letter of credit, standby bond purchase agreement or similar credit enhancement or liquidity facility established to provide credit or liquidity support for Bonds or Parity Indebtedness.

"Dealer" means a financial institution or government bond dealer which (i) is a member of the Securities Investors Protection Corporation and (ii) has a long-term debt rating in one of the three highest rating categories by at least one of the Rating Agencies or has a dealer or parent holding company that has a long-term debt rating within one of the three highest rating categories by at least one of the Rating Agencies.

"Debt Service Component" means the portion of the Cost of Contracted Services that an Authorized City Representative determines, in a certificate delivered to the Trustee, to be for the purpose of paying a fixed charge or the principal of or interest on the obligations, directly or indirectly associated with rendering the Contracted Services, of the person providing the Contracted Services.

"Debt Service Requirement" means, for any period of twelve consecutive months for which such determination is made, the aggregate of the amounts required to be deposited, as the case may be in the Bond Fund, the Parity Debt Service Fund and the Subordinate Debt Service Fund during this period with respect to any Bonds, Parity Indebtedness or Subordinate Indebtedness; provided, however, that:

(a) with respect to any Option Obligations, such Option Obligations will be assumed to mature on their stated dates of maturity;

(b) with respect to Balloon Indebtedness, it will be assumed that the principal of such Balloon Indebtedness, together with interest at the rate applicable to such Balloon Indebtedness, will be amortized in equal annual installments over a period of thirty years from the date the Balloon Indebtedness was incurred;

(c) with respect to Variable Rate Indebtedness, interest on such Indebtedness will be calculated at the Average Interest Rate;

(d) with respect to obligations related to any Credit Facility which constitute Parity Indebtedness or Subordinate Debt, to the extent that such Credit Facility has not been used or drawn upon, or any such drawing or use has been reimbursed to the provider the principal and interest relating to such Credit Facility will not be included in the Debt Service Requirement for such Parity Indebtedness or Subordinate Debt; and

(e) with respect to any Derivative Indebtedness, the interest on such Indebtedness will be calculated at the Hedged Fixed Rate, if any.

"Debt Service Reserve Fund" means the debt service reserve fund established under the Master Indenture.

"Debt Service Reserve Requirement" means, as of any particular date of calculation, the sum of (i) the Prior DSR Requirement computed with respect to the Prior Series only and (ii) with respect to any other Series of Bonds, an amount at least equal to the least of (x) the maximum principal and interest due on such Series of Bonds then Outstanding in the then current or any future Fiscal Year, (y) 125% of the average annual principal and interest due on such Series of Bonds then Outstanding in the then current and each future Fiscal Year and (z) 10% of the proceeds of such Series of Bonds (within the meaning of the Code); provided that the Supplemental Indenture corresponding to any Series of Bonds (other than the Prior Series) may provide for the establishment of a separate account in the Debt Service Reserve Fund to secure only such Series of Bonds (and any Bonds issued to refund such Series in part), with such Series of Bonds having no claim on the other moneys deposited to the credit of the Debt Service Reserve Fund or any other account therein), the Debt Service Reserve Requirement for such Series of Bonds will be calculated as set forth in the corresponding Supplemental Indenture. With respect to any Series of Bonds, the Debt Service Reserve Requirement may be increased by the City to the extent that there is delivered to the Trustee an opinion of Bond Counsel to the effect that the increase will not adversely affect the exclusion of interest on the Bonds from gross income for purposes of federal income taxation. In determining the amount of principal and interest due on Bonds which are Variable Rate Indebtedness, interest will be calculated at a rate equal to the greater of (i) the actual interest rate on the Bonds in effect on the date of their issuance or (ii) the current average yield on municipal revenue bonds maturing in thirty years, according to the weekly index published by The Bond Buyer for the week immediately preceding the week in which the Bonds are issued. In the event The Bond Buyer is not published as the date of any determination, or if published, does not publish an index of the current yield on municipal revenue bonds maturing in thirty years, an alternative index or other source of current bond yields may be designated by the Authorized City Representative. In determining the amount of principal and interest due on Bonds which are Balloon Indebtedness, the amount of principal and interest on the Balloon Indebtedness due in any year will be calculated by assuming that the original principal amount of the Balloon Indebtedness amortized in equal annual installments over a period of thirty years from the date the Balloon Indebtedness was incurred. In computing the amount of the Debt Service Reserve Requirement, the City may, at its option, disregard any portion of interest on Bonds issued in the form of "tax credit bonds" for which the City expects to be reimbursed by the federal government (for example, Direct Pay Build America Bonds issued under Section 54AA of the Code).

"Defeased Municipal Obligations" mean obligations of state or local government municipal bond issuers, which are rated in the highest rating category by Moody's Investors Service, Inc., and Standard & Poor's Ratings Services, provision for the payment of the principal of and interest on which has been made by the deposit with a trustee or escrow agent of Government Obligations or Government Certificates, the maturing principal of and interest on which, when due and payable, will provide sufficient money to pay the principal of, redemption premiums, if any, and interest on such obligations of state or local government municipal bond issuers.

"Defeased Municipal Obligation Certificate" means evidence of ownership of a proportionate interest in specified Obligations, which Obligations are held by a bank or trust company organized and existing under the laws of the United States of America or any of its states acceptable to the Trustee in the capacity of custodian.

"Defeasance Obligations" mean (i) noncallable Government Obligations, (ii) Government Certificates, (iii) Defeased Municipal Obligations and (iv) Defeased Municipal Obligation Certificates. With respect to the 2012 Bonds only, the term "Defeasance Obligations" includes the foregoing and noncallable bonds, notes and other obligations of any agency of the United States eligible for the investment of public sinking funds under the Investment Act.

"De Minimis Amount" means (i) in reference to original issue discount (as defined in Section 1273(a)(1) of the Code) or premium on an obligation (A) an amount that does not exceed 2% multiplied by the stated redemption price at maturity plus (B) any original issue premium that is attributable exclusively to reasonable underwriter's compensation; and (ii) in reference to market discount (as defined in Section 1278(a)(2)(A) of the Code) or premium on an obligation, an amount that does not exceed 2% multiplied by the stated redemption price at maturity.

"Derivative Indebtedness" has the meaning given to it in any Supplemental Indenture authorizing the issuance of a Series of Bonds and may also include, but is not limited to, a portion of Indebtedness which bears interest at a variable rate during any future period of time meeting the following requirements:

(a) the City has entered into a Hedge Agreement in respect of such Indebtedness within sixty days of the date of the issuance of the Indebtedness, and

(b) the Hedge Agreement provides that during the entire period that such Indebtedness bears interest at a variable rate the City will pay a fixed rate to the provider of the Hedge Agreement and the provider of the Hedge Agreement will pay the variable rate borne by such Indebtedness, or such Indebtedness, taken together with the Hedge Agreement, results in a net fixed rate payable by the City to the provider of the Hedge Agreement for such period of time (the "Hedged Fixed Rate"), assuming the City and the provider of the Hedge Agreement make all payments required to be made by the terms of the Hedge Agreement.

"Director of Finance" means the Director of Finance of the City or, if the City no longer has a person with the title of Director of Finance, the person filling the office with similar duties as the Director of Finance.

"Director of Utilities" means the Director of Utilities of the City or if the City no longer has a person with the title of Director of Utilities, the person filling the office with similar duties as the Director of Utilities.

"Existing Debt Service" means for any Fiscal Year the amount budgeted to be paid to the general fund of the City to pay debt service on general obligation bonds of the City issued to pay costs of the System.

"Event of Default" means any Event of Default described in "Summary of Certain Provisions of the Indenture – Event of Default."

"Financial Institution" means any Bank, Insurance Company or Dealer.

"Fiscal Year" means the period of twelve months established by the City as its annual accounting period.

"Fixed Rate Investment" means any obligation the yield on which was fixed and determinable on its issue date.

"General Reserve Fund" means the general reserve funds established under the Master Indenture.

"Government Certificates" mean evidences of ownership of a proportionate interest in specified Government Obligations which are held by a bank or trust company organized and existing under the laws of the United States of America or any of its states acceptable to the Trustee in the capacity of custodian.

"Government Obligations" mean bonds, notes and other direct obligations of the United States of America and securities unconditionally guaranteed as to the timely payment by the United States of America.

"Hedge Agreement" means a contract or agreement, payable from Net Revenues on a parity with or subordinate to any Bonds or Parity Indebtedness intended to place Indebtedness on the interest rate, currency, cash flow or other basis desired by the City, including, without limitation, any interest rate swap agreement, currency swap agreement, forward payment conversion agreement or futures contract, any contract providing for payments based on levels of, or changes in, interest rates, currency exchange rates, stock or other indices, any contract to exchange cash flows or a series of payments, or any contract, including, without limitation, an interest rate floor or cap, or an option, put or call, to hedge payment, currency, rate, spread or similar exposure, between the City and a counterparty; provided that not less than 30 days prior to the City's execution of such contract or agreement, each Rating Agency which maintains a rating with respect to any Indebtedness receives notice in writing of the City's pending execution thereof; and provided further that at the time of origination each Rating Agency which maintains a rating with respect to any Indebtedness confirms in writing to the City that the City's execution and delivery of such contract will not result in a downgrading, withdrawal or suspension of such rating.

"Hedge Fixed Rate" means Hedged Fixed Rate as defined in definition of Derivative Indebtedness.

"Indebtedness" means the Bonds, any Parity Indebtedness or any Subordinate Debt.

"Insurance Company" means an insurance company with a long-term debt rating within one of the three highest rating categories by at least one of the Rating Agencies.

"Interest Account" means the Interest Account of the Bond Fund.

"Interest Payment Date" means any date on which a payment of interest on any Bonds or any Parity Indebtedness is due.

"Interest Period" means the period from and including an Interest Payment Date to and including the day before the next Interest Payment Date, except the first Interest Period for each Series of Bonds and Parity Indebtedness will be the period from and including the date specified in the Supplemental Indenture authorizing the Series of Bonds or the document authorizing the Parity Indebtedness for the Bonds or Parity Indebtedness to begin to bear interest to and including the day before the first Interest Payment Date.

"Investment Act" means the Investment of Public Funds Act, Chapter 45, Title 2.2, Code of Virginia of 1950, as amended.

"Master Indenture" means the Master Indenture of Trust, between the City and the Trustee, as it may be modified, altered, amended and supplemented from time to time in accordance with its terms.

"Net Proceeds" mean the proceeds from any insurance recovery remaining after payment of attorneys' fees, fees and expenses of the City and the Trustee and all other expenses incurred in collection of the gross proceeds.

"Net Revenues" mean Revenues less Operating Expenses.

"Operating Component" means the portion of the Cost of Contracted Services reasonably determined by an Authorized City Representative, in a certificate delivered to the Trustee from time to time, to be directly or indirectly attributable to the ownership or operation of the System without regard to its treatment under generally accepted accounting principles; provided, however, if no such determination is made, all of the Cost of Contracted Services will be treated as Operating Component.

"Operating Expenses" mean all expenses which may reasonably be determined by the City in its Annual Budget to be directly or indirectly attributable to the ownership or operation of the System and payable as Operating Expenses without regard to the treatment of such expenses under generally accepted accounting principles, including, without limitation, reasonable and usual expenses of administration, operation, maintenance and repair, which may include expenses not annually recurring, costs of billing and collecting the rates, fees and charges for the use of or the services furnished by the System, the Operating Component of the Cost of Contracted Services, insurance and surety bond premiums and reserves, other charges and fees necessary for the maintenance of adequate insurance coverage for the City and the System, fees and payments for any Credit Facility, legal, engineering and auditing expenses, expenses and compensation of the Trustee, reimbursement to the City's general fund for the cost of services rendered with respect to the System, and other expenses of the City required to be paid by law or under the Master Indenture or any Supplemental Indenture, but will not include (i) any allowance for amortization or depreciation, (ii) deposits or transfers to the Bond Fund, the Parity Debt Service Fund, the Debt Service Reserve Fund, the Subordinate Debt Service Fund, the Repair and Replacement Reserve Fund, the Rate Stabilization Fund, (iii) payments for Existing Debt Service or City Obligations and (iv) expenditures which the City makes an election to capitalize.

"Operating Fund" means the operating fund established under the Master Indenture.

"Opinion of Counsel" means a written opinion of any Counsel in form and substance acceptable to the Trustee.

"Option Obligations" mean any Indebtedness which by its terms may be tendered by and at the option of its Owner or holder for purchase before its stated maturity.

"Outstanding" means, at any date, the aggregate of all Indebtedness authorized, issued, authenticated and delivered under the Master Indenture and not paid and discharged, except:

(a) Indebtedness cancelled or surrendered to the Paying Agent for cancellation;

(b) Indebtedness deemed to have been paid as provided in the Master Indenture or in such other instrument authorizing its issuance; and

(c) Indebtedness in lieu of or in substitution for which other Indebtedness has been authenticated and delivered pursuant to the Master Indenture and any Supplemental Indenture unless proof satisfactory to the Paying Agent is presented that any such Indebtedness is held by a bona fide Owner.

In determining whether Owners of a requisite aggregate principal amount of the Outstanding Bonds or Parity Indebtedness have concurred in any request, demand, authorization, direction, notice, consent or waiver under the Indenture, the principal amount of Capital Appreciation Bonds will be their Accreted Value (as of the immediately preceding Compounding Date). Indebtedness which is owned by the City will be disregarded and deemed not to be Outstanding for the purpose of any such determination; provided, however, that for the purpose of determining whether the Trustee will be protected in relying upon any request, demand, authorization, direction, notice, consent or waiver, only Indebtedness which the Trustee knows to be so owned will be disregarded.

"Owner" means the Person in whose name a particular Bond is registered on the records of the Paying Agent or who is the holder of Parity Indebtedness.

"Parity Debt Service" means, for any period of twelve consecutive months, the Debt Service Requirement with respect to Parity Indebtedness.

"Parity Debt Service Component" means all or any portion of the Debt Service Component of the Cost of Contracted Services under the Service Contracts meeting the requirements of the Master Indenture that an Authorized City Representative, determines in a certificate delivered to the Trustee will be payable on a parity with the Bonds.

"Parity Debt Service Fund" means the parity debt service fund established under the Master Indenture.

"Parity Indebtedness" means (i) the Parity Debt Service Component of the Cost of Contracted Services and (ii) any other Parity Indebtedness incurred in accordance with the Master Indenture which is secured on a parity with the Bonds, including bonds, notes or other evidences of indebtedness issued pursuant to the Master Indenture and any Supplemental Indenture equally and ratably secured by a pledge of Net Revenues and, at the City's option, any other security pledged to such bonds, notes or other evidences of indebtedness but which are not secured by the Debt Service Reserve Fund. Parity Indebtedness may also include Bond Anticipation Notes, Hedge Agreements or obligations with respect to Credit Facilities; provided, however, Parity Indebtedness does not include any Bonds or any other indebtedness of the City issued from the time to time under any other indenture, trust agreement, ordinance, resolution or other instrument not secured by a pledge of Revenues.

"Paying Agent" means any paying agent for the Bonds (and may include the Trustee) and its successor or successors appointed pursuant to the provisions of any Supplemental Indenture. Unless otherwise provided in a Supplemental Indenture, the Trustee will be the Paying Agent.

"Person" means an individual, a corporation, a partnership, a general partner of a partnership, an association, a joint stock company, a trust, any unincorporated organization, or a governmental unit or its political subdivision.

"PILOT" means for any Fiscal Year the amount budgeted to be paid with respect to the System to the general fund of the City in lieu of taxes.

"Plain Par Investments" mean a Fixed Rate Investment:

(a) Issued with not more than a De Minimis Amount of original issue discount or premium, or, if acquired on a date other than its issue date, acquired with not more than a De Minimis Amount of market discount or premium;

(b) Issued for a price that does not include accrued interest other than pre-issuance accrued interest;

(c) That bears interest from its issue date at a single, stated, fixed rate, with interest unconditionally payable at least annually; and

(d) That has a lowest stated redemption price that is not less than its outstanding stated principal amount.

"Present Value" means the present value computed under the economic accrual method (using the same compounding interval and financial conventions used to compute the yield on the relevant Series of Bonds under Section 148 of the Code), of all unconditionally payable receipts to be received from and payments to be paid for an investment after the valuation date, using the Yield (as defined in the Tax Compliance Agreement) on the investment as the discount rate.

"Principal Account" means the Principal Account of the Bond Fund.

"Principal Payment Date" means any date on which a payment of principal or Accreted Value of any Bonds or any Parity Indebtedness is due.

"Principal Period" means the period from and including a Principal Payment Date to and including the day before the next Principal Payment Date, except the first Principal Period for each Series of Bonds or Parity Indebtedness will be the twelve months immediately preceding the first Principal Payment Date unless some other period is specified in the Supplemental Indenture authorizing the Series of Bonds or the Service Contract or other document authorizing the Parity Indebtedness.

"Prior DSR Requirement" means an amount equal at least to the lesser of (i) the maximum principal and interest due on the Prior Series then Outstanding in the then current or any future Fiscal Year and (ii) 125% of the average annual principal and interest due on the Prior Series then Outstanding in the then current and each future Fiscal Year.

"Prior Series" means, for purposes of this Appendix A and as of any particular date of calculation, the then-Outstanding 2008 Bonds and 2010 Bonds.

"Project" will have the meaning set forth in any Supplemental Indenture.

"Project Fund" means the project fund established under the Master Indenture.

"Rate Stabilization Fund" means the Rate Stabilization Fund established under the Master Indenture.

"Rate Stabilization Requirement" means such amount as may be established by the City pursuant to the Master Indenture, and if no such amount is established, the Rate Stabilization Requirement will be zero.

"Rating Agency" means any nationally recognized securities rating agency then rating the Bonds at the request of the City.

"Redemption Account" means the Redemption Account of the Bond Fund.

"Refunding Bonds" means a Series or portion of a Series of Bonds issued to retire or refund all or any portion of another Series of Bonds, Parity Indebtedness or other obligations of the City.

"Repair and Replacement Reserve Fund" means the repair and replacement reserve fund established under the Master Indenture.

"Replacement Reserve Requirement" means an amount to be determined by the City pursuant to Section 7.8(b) of the Master Indenture, but not less than $1,000,000.

"Revenue Fund" means the fund established in the Master Indenture.

"Revenues" mean all revenues, receipts and other income derived or received by the City from the ownership or operation of the System including, without limitation, any investment earnings and transfers, if any, from the Rate Stabilization Fund to the Revenue Fund, but excluding (i) any gift, grant or contributions to the extent restricted by the donor or grantor to a particular purpose inconsistent with its use for the payment of Senior Debt Service or Subordinate Debt Service, (ii) proceeds derived from insurance or condemnation, and (iii) any transfers from the Revenue Fund to the Rate Stabilization Fund. Any lump sum prepayment of Revenues received by the City will be reserved by the City in a subaccount in the Revenue Fund and disbursed from the subaccount and recognized as Revenues monthly over the appropriate accrual period.

"ROI" means for any Fiscal Year the amount budgeted to be paid with respect to the System to the general fund of the City as a return on the City's investment in the System.

"Senior Debt Service" means for any period of twelve consecutive months the sum of Bond Debt Service and Parity Debt Service during the period.

"Serial Bonds" mean any Bonds of a Series which are stated to mature in annual installments including any Capital Appreciation Bonds, but not including any Term Bonds.

"Series" or "Series of Bonds" mean a separate series of Bonds issued under the Master Indenture pursuant to a Supplemental Indenture.

"Service Contracts" mean any contracts or agreements for Contracted Services entered into by the City from time to time.

"Subordinate Debt" means bonds, notes or other evidences of indebtedness of the City, including the Debt Service Component of the Cost of Contracted Services and any lease which is required to be capitalized by generally accepted accounting principles which is not a Parity Debt Service Component, secured by a pledge of Net Revenues expressly made subordinate to the pledge of Net Revenues securing the Bonds and Parity Indebtedness or which is unsecured.

"Subordinate Debt Service" means for any period of twelve consecutive months the Debt Service Requirement with respect to any Subordinate Debt and the Debt Service Component of the Cost of Contracted Services which is not a Parity Debt Service Component.

"Subordinate Debt Service Fund" means the subordinate debt service fund established in the Master Indenture.

"Supplemental Indenture" means any indenture supplemental to or amendatory of the Master Indenture as originally executed, which is duly executed and delivered in accordance with the provisions of the Master Indenture.

"System" means the water system, owned or operated by or on behalf of the City, including but not limited to, any Project and all additions, extensions, improvements and replacements to the System, and any other utility system which may be added by the City as a part of the System pursuant to the Master Indenture, but excluding any independent utility systems hereafter owned or operated by the City and accounted for separately by the City unless made part of the System by the City.

"Term Bonds" means Bonds of a Series which are stated to mature on one date and which are subject to scheduled mandatory redemption before such date.

"Test Period" has the meaning given to it in the Indenture in connection with the issuance of Additional Bonds.

"Variable Rate Indebtedness" means any Indebtedness, interest on which is not established at the time of its issuance at a rate which is fixed until its maturity.

Summary of Certain Provisions of the Indenture

The following is a brief summary of certain provisions contained in the Master Indenture and the Thirteenth Supplemental Indenture and does not purport to be a complete statement of all of the provisions of those documents. Reference is made to the Master Indenture and the Thirteenth Supplemental Indenture in their entirety for complete information on their terms and on the terms of the 2018 Bonds, the applicable security provisions and the application of the Revenues. See also "DESCRIPTION OF THE BONDS" and "SECURITY AND SOURCES OF PAYMENT FOR THE BONDS" in the Official Statement.

Definitions

Unless defined below, all capitalized terms used in this Appendix have the meanings set forth in the foregoing section entitled "Definitions of Certain Terms."

Additional Bonds

In connection with the issuance of Additional Bonds, the City is required to file, among other things, the following documents with the Trustee:

(1) A certificate of the City dated as of the date of delivery of the Additional Bonds and signed by the City Manager or Director of Finance to the effect that to the best of his or her knowledge, upon and immediately following the issuance of the Additional Bonds, no event of default under the Indenture and no event or condition which, with notice or lapse of time or both, would become an event of default, will have occurred and be continuing or, if such an event or condition has occurred and is continuing, it will be cured upon the issuance of the Additional Bonds or upon completion of the Project to be financed with the Additional Bonds.

(2) A copy of the resolution or ordinance and an executed counterpart of the supplement to the Master Indenture authorizing the Additional Bonds, which supplement will specify, among other things, the details of the Additional Bonds and the amount, if any, to be deposited from the proceeds of sale of the Additional Bonds into the Debt Service Reserve Fund.

(3) An opinion of Bond Counsel, subject to customary exceptions and qualifications, to the effect that the issuance of the Additional Bonds has been duly authorized, that the Additional Bonds are valid and binding limited obligations of the City entitled to the benefits and security of the Master Indenture and that the interest on the Additional Bonds is excludable from gross income for purposes of federal income taxation or, if the interest is not excludable, that the issuance and the intended use of the proceeds of the Additional Bonds will have no adverse effect on the tax exempt status of interest on any other Bonds then Outstanding, the interest on which was excludable from gross income when issued.

(4) If the Additional Bonds are issued to pay the cost of acquiring, renovating, equipping or constructing improvements, extensions, additions or replacements to the System,

> (a) A written statement from (i) Director of Utilities setting forth his or her estimate of the cost of the acquisition, renovation, equipping or construction (including all financing, reserves and related costs) and the date on which such acquisition, renovation, equipping or construction will be completed and (ii) the Director of Finance giving his or her opinion that the proceeds of the Additional Bonds, together with any other money available for such purpose, will be sufficient to pay the cost of the acquisition, renovation, equipping or construction; and
>
> (b) The amount of the Net Revenues as received during any 12 consecutive months of the twenty four months immediately preceding the issuance of the Bonds (the "Test Period"), as certified by the Director of Finance or the Consulting Engineer, subject to adjustment as permitted in subsection (c) below, will be equal to the revenue covenant contained in the Master Indenture for the Test Period taking into account the maximum principal and interest payments due on (i) any Bonds and Parity Indebtedness then outstanding, and (ii) the Bonds and Parity Indebtedness then proposed to be issued.

(c) Adjustments to Net Revenues permitted by the foregoing subsection, shall be certified by the Director of Finance or the Consulting Engineer to the Director of Utilities and shall be computed as follows:

(i) If the City, before the issuance of the proposed Bonds, has increased the rates, fees, rentals or other charges for the services or use of the System, the Net Revenues for the Test Period shall be adjusted to include the Net Revenues which would have been derived from the System during the Test Period as if such increased rates, fees, rentals or other charges had been in effect during the Test Period.

(ii) If the City has acquired or has contracted to acquire any privately or publicly owned existing water system, sewer system, solid waste collection and disposal system, stormwater retention system, or any other utility system that the City will consolidate with the System, the cost of which shall be paid from all or part of the proceeds of the issuance of the proposed Bonds, then the Net Revenues derived from the System during the Test Period shall be increased by adding to the Net Revenues for the Test Period the projected Net Revenues which would have been derived from the System as if such utility system had been operated by the City as part of the System during the Test Period.

(iii) If the City has entered into a contract on or before the date of the issuance of the proposed Bonds or Parity Indebtedness, with any public body whereby the City has agreed to furnish services consistent with the services performed by the System, which contract (A) is for a duration of not less than the final maturity of the Bonds or Parity Indebtedness proposed to be issued, or (B) if less than the final maturity of such Bonds or Parity Indebtedness, contain provisions obligating the party contracting with the City to pay in full its allocated share of the costs of capital improvements to the System needed to carry out the terms of the contract, then the Net Revenues of the System during the Test Period shall be increased by the least amount which the entity receiving such services shall be required to pay by the terms of the contract in any one year during which the City is to furnish services and such Bonds or Parity Indebtedness are anticipated to be Outstanding, after deducting from such payment the estimated proportion of operating expenses and repair, renewal and replacement cost attributable in such year to such services.

(iv) If there is an estimated increase in Revenues to be received by the City, as a result of additions, extensions or improvements to the System during the period of three years after delivery of the Bonds and the governing body of the City has by ordinance or resolution authorized the additions, extensions or improvements (and if such additions, extensions or improvements involve another jurisdiction, the governing body of such other jurisdiction has also given its approval by ordinance or resolution), then the Net Revenues derived from the System during the Test Period will be increased by the estimated average annual additional Net Revenues for the first two full years after such additions, improvements or extensions have been placed in service.

In connection with any Net Revenue adjustment permitted by subparagraphs (ii), (iii) or (iv) above, the City may take into account any increases in rates, fees or charges that have been approved by the City at the time of certification.

(5) If the Additional Bonds are issued to refund any of the Bonds or other Parity Indebtedness of the City issued under the Indenture,

(a) Evidence satisfactory to the Trustee that the City has made provision as required by the Indenture for the payment or redemption of all Bonds or Parity Indebtedness of the City to be refunded;

(b) A written determination by the Trustee or by a firm of independent certified public accountants that the proceeds (excluding accrued interest) of the refunding bonds, together with any other money deposited with the Trustee for such purpose and the investment income to be earned on funds held by the Trustee for the payment or redemption of Bonds or Parity Indebtedness, will be sufficient to pay, whether upon redemption or at maturity, the principal of and premium, if any, and interest on the Bonds or Parity Indebtedness to be refunded and the estimated expenses incident to the refunding; and

(c) (i) A written determination by the Trustee or by a firm of independent certified public accountants that after the issuance of the refunding bonds and the provision for payment or redemption of all Bonds or Parity Indebtedness of the City to be refunded, the Senior Debt Service for each Fiscal Year in which there will be Outstanding Bonds of any Series not to be refunded will be not more than the Senior Debt Service for the Fiscal Year would have been on all Outstanding Bonds and Parity Indebtedness immediately before the issuance of the refunding bonds, including the Bonds and Parity Indebtedness of the City to be refunded; or (ii) in the case of Refunding Bonds issued to refund Parity Indebtedness issued under the Master Indenture in the form of Bond Anticipation Notes, the City shall provide the written certification required in 4(b) above; or (iii) if the Refunding Bonds will satisfy neither (i) nor (ii) above, a written certification similar to that required in 4(b) above with respect to the first two full Fiscal Years following the issuance of the Refunding Bonds.

(6) If the Additional Bonds are issued to refund obligations of the City with respect to the System other than Bonds or Parity Indebtedness, the certifications similar to those required in 5(a) and 4(b) above.

The proceeds of Additional Bonds (including accrued interest) will be applied as set forth in the Thirteenth Supplemental Indenture authorizing their issuance.

Parity Indebtedness

The City may designate the Debt Service Component of the Cost of Contracted Services as Parity Indebtedness and may issue or refinance other Parity Indebtedness provided the requirements of paragraphs (4) or (5), as appropriate, for the issuance of Additional Bonds are met as if the Parity Indebtedness was a series of Additional Bonds. Parity Indebtedness will be secured by the pledge of Net Revenues under the Indenture on a parity with Bonds issued under the Indenture, except Parity Indebtedness will not be secured by money in the Project Fund, the Bond Fund or the Debt Service Reserve Fund.

Subordinate Debt

Nothing in the Indenture prohibits or prevents the City from issuing Subordinate Debt for any lawful purpose payable from and secured by a pledge of Net Revenues subject and subordinate to the payment of any Bonds and Parity Indebtedness; provided, however, any Subordinate Debt may only be declared immediately due and payable if payment of the Bonds and Parity Indebtedness has been accelerated in accordance with the Indenture.

Establishment of Funds and Accounts

The following funds are established under the Indenture, to be held as follows:

(1) City of Norfolk, Virginia, Project Fund, to be held by or at the direction of the City;

(2) City of Norfolk, Virginia, Revenue Fund, to be held by or at the direction of the City;

(3) City of Norfolk, Virginia, Operating Fund, to be held by or at the direction of the City;

(4) City of Norfolk, Virginia, Bond Fund, in which there is established an Interest Account, a Principal Account and a Redemption Account and a Capitalized Interest Account, to be held by the Trustee;

(5) City of Norfolk, Virginia, Parity Debt Service Fund, to be held by or at the direction of the City;

(6) City of Norfolk, Virginia, Debt Service Reserve Fund, to be held by the Trustee;

(7) City of Norfolk, Virginia, Subordinate Debt Service Fund, to be held by or at the direction of the City;

(8) City of Norfolk, Virginia, Repair and Replacement Reserve Fund, to be held by or at the direction of the City;

(9) City of Norfolk, Virginia, Rate Stabilization Fund, to be held by or at the direction of the City; and

(10) City of Norfolk, Virginia, General Reserve Fund, to be held by or at the direction of the City.

Project Fund

The City will maintain for each Series of Bonds a separate subaccount, as provided in any supplemental indenture. Net Proceeds used to repair, restore or reconstruct the System will also be deposited in the Project Fund and maintained within separate subaccounts for each Series of Bonds.

Revenue Fund

The City will collect and deposit in the Revenue Fund as received all Revenues. Money on deposit in the Revenue Fund will be used as follows:

(1) To make monthly deposits to the Operating Fund in an amount such that the balance on deposit in the Fund will be equal to not less than one sixth of the Operating Expenses budgeted to be paid from the Fund in the current Annual Budget;

(2) To make equal monthly deposits to the Bond Fund and Parity Debt Service Fund so that there will be sufficient money in the Funds to pay the Bonds and Parity Indebtedness when due;

(3) If the amount in the Debt Service Reserve Fund or any account therein is less than its respective Debt Service Reserve Requirement, the amount of money remaining in the Revenue Fund necessary to restore the Debt Service Reserve Fund and the accounts therein to their respective Debt Service Reserve Requirements on a pro rata basis, or all of the money remaining if less than the amount necessary; provided that such restoration of the amount in the Debt Service Reserve Fund and any account therein must occur not later than twelve months following the determination of the deficiency;

(4) To make deposits to the Subordinate Debt Service Fund of amounts determined by the City to be necessary to pay Subordinate Debt when due;

(5) To make deposits to the Repair and Replacement Reserve Fund to accumulate the Replacement Reserve Requirement in thirty six approximately equal installments and then to restore any deficit in sixty approximately equal monthly installments;

(6) To make other deposits to the Repair and Replacement Reserve Fund in amounts determined by the City;

(7) To make deposits to the Rate Stabilization Fund to accumulate the Rate Stabilization Requirement in twenty-four approximately equal installments and thereafter to restore any deficit in such Fund in the same number of installments; and

(8) To make deposits of any remaining balance to the General Reserve Fund.

Operating Fund

The City will pay Operating Expenses from the Operating Fund as they become due and in accordance with the purposes and amounts provided in the Annual Budget. In the event the balance in the Operating Fund is insufficient for its purposes, the City will transfer to the Operating Fund such amounts as may be necessary first from the General Reserve Fund and then from the Repair and Replacement Reserve Fund. The City may also make transfers from the Rate Stabilization Fund to the Operating Fund to cover any deficit and may do so before, in combination with, or in lieu of transfers from the General Reserve Fund and the Repair and Replacement Reserve Fund. Interest received on and any profit realized from the investment of money in the Operating Fund will be transferred as earned to the Revenue Fund.

Bond Fund

The Trustee will pay the principal of and interest on the Bonds when due from the Principal Account and the Interest Account, respectively. The Trustee will use money in the Redemption Account of the Bond Fund to redeem Bonds pursuant to any optional redemption provision exercised by the City. In the event the balances on deposit in the Principal Account or the Interest Account are insufficient, the Trustee will transfer to such Accounts the amount necessary to pay the Bonds from the Debt Service Reserve Fund after making transfers first from the General Reserve Fund, the Repair and Replacement Reserve Fund and the Rate Stabilization Fund. Interest received on and any profit realized from the investment of money in the Bond Fund will become a part of the account in the Bond Fund in which the investment is held.

Parity Debt Service Fund

The City will use money in the Parity Debt Service Fund to make payments on any Parity Indebtedness when due. Interest received on and any profit realized from the investment of money in the Parity Debt Service Fund will be deposited when received in the Revenue Fund. Amounts in the Parity Debt Service Fund do not secure the Outstanding Series of Bonds and will not secure the 2018 Bonds or any Additional Bonds.

Debt Service Reserve Fund

The Debt Service Reserve Fund and any accounts therein will be used by the Trustee to make transfers to the Bond Fund to the extent necessary to pay when due the principal of and interest on the Bonds if the amounts on deposit in the Principal and Interest Accounts of the Bond Fund, and any amounts transferred by the City to the Debt Service Reserve Fund from the General Reserve Fund and the Repair and Replacement Reserve Fund are insufficient for such purpose. If there is a deficiency in the balance on deposit in the Debt Service Reserve Fund or any account therein, the City will transfer funds from the Revenue Fund to restore the Fund or account in the manner described above.

In lieu of maintaining and depositing money or securities in the Debt Service Reserve Fund or any account therein, the City may deposit with the Trustee a letter of credit, bond insurance policy or surety bond in an amount equal to all or a portion of the requirement for the Fund or such account, provided the issuer of the letter of credit or surety bond or the bond insurer, as appropriate, is rated in one of the two highest long term debt rating categories by the Rating Agencies then rating the Bonds, without regard to any refinement or gradation of such rating category by numerical modifier or otherwise. Any letter of credit, bond insurance policy or surety bond will permit the Trustee to draw or obtain amounts under it for deposit in the Debt Service Reserve Fund or such account that, together with any money already on deposit therein, are not less than the required balance. In addition, the Supplemental Indenture corresponding to any Series of Bonds (other than the Prior Series) may provide for the establishment of a separate account in the Debt Service Reserve Fund to secure only such Series of Bonds (and any Bonds issued to refund such Series in part), with such Series of Bonds having no claim on the other moneys deposited to the credit of the Debt Service Reserve Fund or any other account therein, the Debt Service Reserve Requirement for such Series of Bonds will be calculated as set forth in the corresponding Supplemental Indenture.

The Trustee will make a drawing on the letter of credit or obtain funds under the bond insurance policy or surety bond before its expiration or termination (1) whenever money is required for the purposes for which Debt Service Reserve Fund money may be applied and (2) unless the letter of credit or bond insurance policy has been extended or a qualified replacement for it delivered to the Trustee, in the event the City has not deposited money in immediately available funds equal to the respective requirement at least two Business Days preceding the expiration or termination of the letter of credit, bond insurance policy or surety bond.

If the City provides the Trustee with a letter of credit, bond insurance policy or surety bond, the Trustee will transfer the funds then in the Debt Service Reserve Fund or account therein to the City, provided the City delivers to the Trustee an opinion of Bond Counsel that such transfer of funds will not adversely affect the exclusion from gross income for purposes of federal income taxation of interest on any Bonds and the City covenants to comply with any directions or restrictions contained in such opinion concerning the use of the funds.

Subordinate Debt Service Fund

The City will use money in the Subordinate Debt Service Fund to make payments of debt service on any Subordinate Debt when due. Interest received on and any profit realized from the investment of money in the Subordinate Debt Service Fund will be deposited when received in the Revenue Fund.

Repair and Replacement Reserve Fund

The City may use amounts in the Repair and Replacement Reserve Fund for any of the following purposes:

(1) Reasonable and necessary expenses with respect to the System for major repairs, replacement or maintenance of items of a type not recurring annually;

(2) To pay costs of reconstruction of parts of the System;

(3) To pay costs of construction of parts of the System;

(4) To pay any capital costs with respect to the System;

(5) To make payments on Service Contracts; or

(6) To make deposits to the Revenue Fund, the Operating Fund, the Bond Fund, the Parity Debt Service Fund or the Debt Service Reserve Fund.

At least biennially, the City agrees to review the adequacy of the amount of the Replacement Reserve Requirement under then current operating conditions, and in light of then applicable operating, replacement and maintenance costs of the major components of comparable systems. If at any time the City determines in its judgment that the amount of the Replacement Reserve Requirement should be increased or decreased, it will notify the Trustee of its determination setting forth the amount of the new Replacement Reserve Requirement. The new Replacement Reserve Requirement will take effect on the date of the receipt of the notice by the Trustee unless some other effective date is specified in the notice in which case the date specified in the notice will control. In no event will such requirement be reduced below $1,000,000.

If the amount on deposit in the Repair and Replacement Reserve Fund exceeds the Replacement Reserve Requirement, the City may transfer the excess to the Rate Stabilization Fund or the General Reserve Fund.

Rate Stabilization Fund

The City may at its option make transfers from the Rate Stabilization Fund to the Revenue Fund and amounts so transferred will be deemed Revenues. Interest earnings or any profit from investing the Rate Stabilization Fund will be transferred at least monthly to the Revenue Fund.

The City may at any time reduce or increase the balance in the Rate Stabilization Fund to any amount, including zero upon certification of the Director of Finance setting forth the amount to be withdrawn or added. Upon satisfaction of the requirements set forth above, the amount of the reduction in the Rate Stabilization Fund will be transferred from the Rate Stabilization Fund to the Revenue Fund, unless otherwise specified in a Supplemental Indenture.

General Reserve Fund

Money on deposit in the General Reserve Fund may be used for any lawful purpose. The City has agreed to use money in the General Reserve Fund to cure deficits in the Operating Fund, the Bond Fund, the Parity Debt Service

Fund and the Debt Service Reserve Fund. Money in the General Reserve Fund is not pledged to secure the Bonds or Parity Indebtedness.

Flow of Funds

The Indenture provides that the City will collect and deposit in the Revenue Fund as received all Revenues derived from the ownership or operation of the System, except as otherwise provided for in the Indenture for investment income on certain funds and accounts created by the Indenture. Not later than the fifth business day before the end of each month, the City will make transfers from the Revenue Fund in the following order of priority:

Operating Fund. An amount such that the balance on deposit in the Operating Fund will be equal to not less than one-sixth of the Operating Expenses to be paid from the Operating Fund in the then-current Fiscal Year as set forth in the annual budget for the System.

Bond Fund. The amount necessary to make the following deposits:

(a) *Interest Account*. An approximately equal amount each month such that (after taking into consideration with respect to each Series of Bonds the amount then on deposit in the Interest Account, any amount to be transferred from the Capitalized Interest Account to the Interest Account pursuant to the terms of any Supplemental Indenture and any amounts to be drawn or paid under any Credit Facility or Hedge Agreement for deposit to the Account), on the fifth business day immediately preceding the next interest payment date for each Series of Bonds, there will be on deposit in the Interest Account an amount equal to the interest on the Outstanding Bonds of each Series to become due on such Interest Payment Date.

(b) *Principal Account*. An approximately equal amount each month such that (after taking into consideration with respect to each Series of Bonds the amount then on deposit in the Principal Account and any amounts to be drawn or paid under any Credit Facility or Hedge Agreement for deposit to the Account), on the fifth business day immediately preceding the next principal payment date for each Series of Bonds, there will be on deposit in the Principal Account an amount equal to the principal and accreted value of the Outstanding Bonds of each Series maturing or required to be redeemed on such Principal Payment Date.

Parity Debt Service Fund. An amount with respect to any Parity Indebtedness such that (after taking into consideration the amount then on deposit in the Fund and any amounts to be drawn or paid under any Credit Facility or Hedge Agreement for deposit to the Fund) if the same amount is transferred to the Fund each month preceding the next ensuing Interest Payment Date or Principal Payment Date for the Parity Indebtedness, there will be on deposit in the Fund an amount equal to the payment due on the Parity Indebtedness on such payment date.

Debt Service Reserve Fund. If the amount in the Debt Service Reserve Fund or any account therein is less than its respective Debt Service Reserve Requirement, the amount of money remaining in the Revenue Fund necessary to restore the Debt Service Reserve Fund and the accounts therein to their respective Debt Service Reserve Requirements on a pro rata basis, or all of the money remaining if less than the amount necessary; provided that such restoration of the amount in the Debt Service Reserve Fund and any account therein must occur not later than twelve months following the determination of the deficiency.

Subordinate Debt Service Fund. Such amount with respect to any Subordinate Debt as may be determined by the City to be necessary to provide for the payment when due of the principal of and interest on the Subordinate Debt.

Repair and Replacement Reserve Fund. The amounts necessary to bring the balance in the Repair and Replacement Reserve Fund to the Replacement Reserve Requirement in not more than (i) thirty-six approximately equal monthly installments for the initial Requirement and (ii) sixty approximately equal monthly installments in the case the Requirement is increased or moneys are withdrawn from the Fund. The "Replacement Reserve Requirement" was initially established and remains at $1,000,000. The City will review periodically the adequacy of the amount of the Requirement and may increase or reduce (but not below the initial Requirement) such amount. Balances in the Repair and Replacement Reserve Fund may be used to pay for major repairs, additions and other capital improvements to the System and to make deposits to the Revenue Fund, Operating Fund, Bond Fund, Parity Debt Service Fund and Debt Service Reserve Fund.

Rate Stabilization Fund. The amounts necessary to bring the balance in the Rate Stabilization Fund to the Rate Stabilization Requirement in not more than twenty-four equal monthly installments. The City will review the adequacy of the amount of the Requirement and may adjust the Requirement at any time as it deems appropriate. Balances in the Rate Stabilization Fund may be transferred to the Operating Fund and will constitute Revenues. The City is not required to maintain any balance in the Rate Stabilization Fund.

General Reserve Fund. Any balance remaining in the Revenue Fund, after making the above deposits, will be deposited in the General Reserve Fund. Balances in the General Reserve Fund are not pledged to secure Bonds or Parity Indebtedness and may be used by the City for any lawful purpose. The City agrees to use amounts in the General Reserve Fund to cure any deficiency in the Operating Fund, the Bond Fund, the Parity Debt Service Fund and the Debt Service Reserve Fund. The City anticipates transferring from the General Reserve Fund to the City's general fund an amount equal to the sum of (i) debt service on general obligation bonds of the City issued to pay costs of the System, (ii) a payment in lieu of taxes and (iii) a return to the City for its investment in the System. These transfers to the City's general fund are not required by the Indenture.

In the event there are insufficient funds in the Revenue Fund to make the transfers required by the Bond Fund and the Parity Debt Service Fund, the City will allocate the available funds between the Bond Fund and the Parity Debt Service Fund in the proportion that the amount required to be deposited to each Fund bears to the total amount required to be deposited to both Funds.

Investments

Any money held in any funds and accounts established by the Indenture, except the Bond Fund and the Debt Service Reserve Fund, may be separately invested and reinvested by the Trustee, at the request of and as directed by an Authorized Representative of the City, in any of the following investments which are at the time legal investments for public funds under the Investment Act, or any subsequent provision of law applicable to such investments:

(1) Bonds, notes and other evidences of indebtedness to which the full faith and credit of the Commonwealth is pledged for the payment of principal and interest or which are unconditionally guaranteed as to the payment of principal and interest by the Commonwealth and which are rated on one of the two highest debt rating categories by at least one of the Rating Agencies;

(2) Government Obligations;

(3) Government Certificates;

(4) Bonds, notes and other evidences of indebtedness of any county, city, town, district, authority or other public body of the Commonwealth which are rated in one of the two highest long-term debt rating categories by at least one of the Rating Agencies;

(5) Savings accounts, time deposits and certificates of deposit in any Bank, including the Trustee and its affiliates, or savings and loan association within the Commonwealth, provided that the funds are secured in the manner required by the Virginia Security for Public Deposits Act or any successor legislation and no deposit will be made for more than five years;

(6) Obligations of the Export Import Bank, the Farmers Home Administration, the General Services Administration, the United States Maritime Administration, the Small Business Administration, the Government National Mortgage Association, the Department of Housing and Urban Development and the Federal Housing Administration, provided such obligations represent the full faith and credit of the United States;

(7) Bonds, notes or other evidences of indebtedness of the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation, the Federal Home Loan Bank and the Federal Farm Credit Bank;

(8) Commercial paper issued by corporations, including banks and bank holding companies, organized under the laws of the United States or any State which is rated by Moody's Investors Service, Inc., or its successor, within its NCO/Moody's rating of prime 1 and by Standard & Poor's Ratings Services, or its successor, within its rating of A 1, and which matures not more than 270 days after the date of its purchase;

(9) Corporate notes with a rating of at least Aa by Moody's and AA by Standard & Poor's Ratings Services with a maturity of not more than five years;

(10) Banker's acceptance, as permitted by the Investment Act, with banks rated in one of the two highest debt rating categories by at least one of the Rating Agencies;

(11) Investments pursuant to the Government Non Arbitrage Act, Article 7.1, Chapter 14, Title 2.1 of the Virginia Code; and

(12) Such other investments as may be permitted by the Investment Act; provided they are rated within one of the two highest rating categories by at least one of the Rating Agencies.

Any money held by the Trustee in the Bond Fund will be separately invested and reinvested by the Trustee, at the request of and as directed by an Authorized City Representative, only in investments described in subsections (1), (2), (3), (4) and (5) above, which are at the time legal investments for public sinking funds under the Investment Act, or any subsequent provisions of law applicable to such investments.

Any money held by the Trustee in the Debt Service Reserve Fund will be separately invested and reinvested by the Trustee, at the request of and as directed by an Authorized City Representative, only in investments described in subsections (1), (2), (3), (4), (5), (6) and (7) above.

Any investments described above may be purchased by the Trustee or the City pursuant to an overnight term or open repurchase agreement in accordance with the provisions of the Indenture.

Investments in a money market fund or in the shares of any other management type investment company registered under the Investment Company Act of 1940, the investments of which fund or company are exclusively in obligations or securities described in paragraphs (1), (2), (3), (4), (6) or (7) above, will be considered investments in obligations described in such subsections, provided that the fund or company, which investments are comprised exclusively of the obligations described in subsections (1), (4) or (7), is rated in the highest debt rating category by at least one of the Rating Agencies.

Subject to the provisions of any Supplemental Indenture, all investments will be held by or under the control of the Trustee or the City, as the case may be, and while so held will be deemed a part of the fund or account in which the money was originally held. Except as otherwise specifically provided in the Master Indenture or any Supplemental Indenture, the interest received on and any profit realized from such investments will be transferred not less frequently than monthly to the City for deposit in the Revenue Fund. The Trustee and the City will sell and reduce to cash a sufficient amount of such investments whenever the cash balance in any fund or account is insufficient for its purpose.

Investments of money in the Debt Service Reserve Fund must mature or be payable at the option of the Trustee for purposes of the Debt Service Reserve Fund not more than 10 years after the date of their purchase.

Money in funds and accounts held by the City may be pooled and commingled for purposes of investment.

Investments are subject to change to the extent and in the manner permitted by subsequent modification or amendment to the Investment Act; provided, however, any rating limitations imposed by the Indenture on a particular type or category of investment will apply to any additional permitted investments of the same or similar type or category.

Particular Covenants

Compliance with Indenture; Payment of Bonds. In the Indenture, the City covenants to perform its obligations under the Indenture and related documents and to pay the Bonds, but only from the Net Revenues and other funds specifically pledged for such purpose.

Revenue Covenant. The City will establish, fix, charge and collect rates, fees and other charges for the use of and for the services furnished by the System, and will, from time to time and as often as appears necessary, revise such rates, fees and other charges, so that in each Fiscal Year Net Revenues are not less than the greater of (i) the sum of 1.1 times Senior Debt Service and 1.0 times Subordinated Debt Service for the Fiscal Year and (ii) 1.0 times the funding requirements for transfers from the Revenue Fund to the Operating Fund, the Bond Fund, the Parity Debt Service Fund, the Debt Service Reserve Fund, the Subordinate Debt Service Fund and the Repair and Replacement Reserve Fund as set forth in the Master Indenture.

Billing; Enforcement of Charges; Free Service. The City will bill the users of the services of the System no less frequently than quarterly, except in the case of wholesale customers who will be billed as provided in the contract between the City and the wholesale customer. The City has agreed to take all appropriate steps to enforce collection of any overdue charges by any remedy available at law or in equity. The City will not permit connection with or the use of the System, or furnish any services of the System, without making a charge based on the City's schedule of rates, fees and charges, except for connections and service for fire protection purposes.

Sale or Encumbrance. The City may grant easements, licenses or permits across, over or under parts of the System for streets, roads and utilities as will not adversely affect the use of the System. The City may sell or otherwise dispose of any property constituting a part of the System which is either no longer needed or useful or is replaced from the proceeds of the disposition and any other necessary money with property serving the same or similar function. If the proceeds received from a sale or disposition not used to replace property exceeds $100,000, the proceeds will at the option of the City be (1) applied to the payment or redemption of Bonds then Outstanding and Parity Indebtedness in a manner which in the opinion of Bond Counsel will not adversely affect the exclusion from gross income for purposes of federal income taxation of interest on any Bonds the interest on which was excludable on the date of their issuance or (2) deposited in the Repair and Replacement Reserve Fund and applied solely to pay the costs of capital improvements to the System. The City may transfer all or substantially all of the assets of the System to an authority or special purpose political subdivision; provided, the City's obligations under the Indenture are assumed in writing, the City receives an Opinion of Bond Counsel that the exempt status of the interest income on the Bonds will not be adversely affected and upon compliance with certain other conditions in the Indenture. The City may add to the System sewer systems, solid waste systems, storm water systems and other utilities on certain terms and conditions set forth in the Indenture similar to those regarding the transfer of System assets.

Creation of Liens. The City has agreed not to create or suffer to be created any lien or charge upon the System, except as provided in the Indenture.

Insurance. To the extent such insurance is available at reasonable costs, the City has agreed to continuously maintain and pay the premiums on insurance against such risks as are customarily insured against by other entities owning and operating similar systems.

Damage, Destruction, Condemnation and Loss of Title. If all or any part of the System is destroyed or damaged by fire or other casualty, condemned or lost by failure of title, the City will restore promptly the property damaged or destroyed to substantially the same condition as before the damage, destruction, condemnation or loss of title with such alterations and additions as the City may determine and which will not impair the capacity or character of the System for the purpose for which it then is being used or is intended to be used. The Trustee will apply as much as may be necessary of the Net Proceeds received on account of any the damage, destruction, condemnation or loss of title to payment of the cost of such restoration, either on completion or as the work progresses. If the Net Proceeds are not sufficient to pay in full the cost of the restoration and other funds are not available for such purpose, the City will pay from the Repair and Replacement Reserve Fund or the General Reserve Fund so much of the cost as may be in excess of such Net Proceeds. Any balance of Net Proceeds remaining after payment of the cost of restoration will be deposited in the Repair and Replacement Reserve Fund.

Financial Records and Statements. The City will keep proper books of records and accounts, in which full and correct entries will be made in accordance with generally accepted accounting principles, of all of its business and affairs. The City will cause an audit of its records and accounts to be made by an independent certified public accountant at the end of each Fiscal Year.

Arbitrage and Tax Covenants. The City has covenanted that it will comply throughout the term of the 2012 Bonds with the requirements of Section 148 of the Code applicable to them, including the rebate and reporting requirements of Section 148(f), and that the City will not take or omit to take any action that would cause interest on any of the Bonds to be or to become includable in the gross income of the Owners for purposes of federal income taxation.

Events of Default

Each of the following events is an Event of Default under the Indenture:

(1) Payment of any interest on any Bond or Parity Indebtedness is not made when due and payable;

(2) Payment of the principal of or premium, if any, on any Bond or Parity Indebtedness is not made when due and payable;

(3) Subject to certain rights of the City to cure such defaults as set forth in the Master Indenture, default in the observance or performance of any other covenant, condition or agreement on the part of the City under the Master Indenture, any Supplemental Indenture, in the Bonds or any document under which Parity Indebtedness has been issued; or

(4) Appointment by a court of competent jurisdiction of a receiver for all or any substantial part of the Revenues and other funds of the City pledged pursuant to the Master Indenture, or the filing by the City of any petition for reorganization of the City or rearrangement or readjustment of the obligations of the City under provisions of any applicable bankruptcy or insolvency law.

Remedies; Rights of Bondholders

Upon the occurrence and continuation of an event of default under the Indenture, the Trustee may, and if requested by the Owners of not less than 25% in aggregate principal amount of Bonds and Parity Indebtedness then Outstanding will, by notice to the City, declare the entire unpaid principal of, Accreted Value of and interest on the Bonds and Parity Indebtedness due and payable. Upon any such declaration the City will pay to the Owners the entire unpaid principal of and accrued interest on the Bonds and Parity Indebtedness, but only from the Net Revenues and the other funds specifically pledged in the Indenture for such purpose.

Upon the occurrence and continuation of an event of default under the Indenture the Trustee may pursue any available remedy, at law or in equity, to enforce the payment of the principal of, Accreted Value of, premium, if any, and interest on the Bonds and Parity Indebtedness, to enforce any covenant or condition under the Indenture or to remedy any event of default.

Upon the occurrence and continuation of an event of default under the Indenture, if requested to do so by the Owners of at least 25% in aggregate principal amount of Bonds and Parity Indebtedness then Outstanding and if indemnified as provided in the Indenture, the Trustee will exercise such of the rights and powers conferred by the Indenture as the Trustee, upon being advised by counsel, deems most effective to enforce and protect the interests of the Owners.

Anything in the Indenture to the contrary notwithstanding the Owners of a majority in aggregate principal amount of Bonds and Parity Indebtedness then Outstanding will have the right, upon providing satisfactory security and indemnity to the Trustee, by an instrument in writing executed and delivered to the Trustee, to direct the method and place of conducting all remedial proceedings to be taken by the Trustee under the Indenture.

No Owner of any Bonds or Parity Indebtedness will have any right to institute any suit action or proceeding in equity or at law for the enforcement of the Indenture or any remedy under the Indenture or the Bonds except as expressly provided in the Indenture.

Waiver of Events of Default

The Trustee will waive any event of default under the Indenture and its consequences and rescind any declaration of acceleration upon the written request of the Owners of a majority in aggregate principal amount of all Outstanding Bonds and Parity Indebtedness. If any event of default with respect to the Bonds and Parity Indebtedness has been waived as provided in the Master Indenture, the Trustee will promptly give written notice of the waiver to the City and by first class mail, postage prepaid, to all Owners of Outstanding Bonds and Parity Indebtedness if the Owners had previously been given notice of the event of default. No waiver, rescission and annulment will extend to or affect any subsequent event of default or impair any right, power or remedy available under the Master Indenture.

Discharge of Indebtedness

If (1) all Bonds and Parity Indebtedness secured by the Indenture have become due and payable or irrevocable instructions to redeem the Bonds and Parity Indebtedness or to pay them at maturity have been given by the City to the Trustee and (2) the Trustee holds cash or noncallable Government Obligations or Government Certificates the principal of, Accreted Value of, and the interest on which at maturity will be sufficient (i) to redeem in accordance with the relevant section of the Indenture all Bonds and Parity Indebtedness that have been called for redemption on the date set for such redemption, (ii) to pay at maturity all Bonds and Parity Indebtedness not irrevocably called for redemption, (iii) to pay interest accruing on all Bonds and Parity Indebtedness until their redemption or payment at maturity, and (iv) to pay to the Trustee its reasonable fees and expenses, including the costs and expenses of cancelling and discharging the Indenture, the Trustee will cancel and discharge the Indenture, and assign and deliver to the City any property at the time subject to the Indenture that may then be in its possession, except funds or securities in which such funds are invested which are held by the Trustee for the payment of principal of, Accreted Value of, or premium, if any, or interest on the Bonds and Parity Indebtedness.

Bonds and Parity Indebtedness will be deemed paid and no longer Outstanding for the purposes of the Indenture when there has been deposited with the Trustee cash or noncallable Government Obligations or Government Certificates the principal of, Accreted Value of, and interest on which will be sufficient to pay or redeem such Bonds and Parity Indebtedness and to pay interest on them to their payment or redemption date (whether on or before the date of their maturity or their redemption date), however, that if such Bonds and Parity Indebtedness are to be redeemed before their maturity, notice of the redemption must have been duly given or irrevocable instructions to redeem such Bonds and Parity Indebtedness must have been given to the Trustee.

Modification or Amendment of the Indenture

The City and the Trustee may, without consent of, or notice to, any of the Owners, enter into an agreement or agreements supplemental to the Indenture for any one or more of the following purposes:

(1) To add to the covenants and agreements of the City contained in the Master Indenture and any Supplemental Indentures other covenants and agreements, and to surrender any right or power in the Master Indenture and any Supplemental Indentures reserved to or conferred upon the City;

(2) To cure any ambiguity, to supply any omission or to cure, correct or supplement any defect or inconsistent provisions contained in the Master Indenture or any Supplemental Indenture;

(3) To grant to the Trustee for the benefit of the Owners additional rights, remedies, powers or authority;

(4) To subject to the Master Indenture and the Supplemental Indentures additional collateral;

(5) To modify the Master Indenture, any Supplemental Indenture, or the Bonds or Parity Indebtedness to permit qualification under the Trust Indenture Act of 1939 or any similar federal statute at the time in effect, or to permit the qualification of the Bonds for sale under the securities laws of any state of the United States;

(6) To provide for uncertificated Bonds or Parity Indebtedness;

(7) To evidence the succession of a new Trustee or Paying Agent or the appointment by the Trustee or the City of a Co Trustee or a Co Paying Agent and to specify the rights and obligations of such Co Trustee or Co Paying Agent;

(8) To make any change (including but not limited to a change to reflect any amendment to the Code or interpretations of it by the United States Department of the Treasury or the Internal Revenue Service) that in the opinion of the Trustee does not materially adversely affect the rights of any Owner of any Bonds or Parity Indebtedness;

(9) To make any modifications or changes necessary or appropriate to issue an additional Series of Bonds or any Parity Indebtedness; or

(10) To make any modifications or changes necessary or appropriate to permit Bonds of any Series or Parity Indebtedness to be secured by a credit or liquidity facility or to accommodate the issuance of Bonds or Parity Indebtedness bearing variable interest rates, including the addition of provisions for the appointment of tender agents and similar parties and the specification of the duties and powers of such parties that in the opinion of the Trustee does not materially adversely affect the rights of any Owner of any Bonds or Parity Indebtedness.

Any other modification or alteration of the Master Indenture and any Supplemental Indenture or the rights and obligations of the City or of the Owners of the Bonds or Parity Indebtedness may be made by the City and the Trustee with the consent of (1) the Owners of a majority in aggregate principal amount of the Bonds and Parity Indebtedness then Outstanding; or (2) in case less than all of the Bonds and Parity Indebtedness then Outstanding are affected by the modifications or amendments, the Owners of a majority in aggregate principal amount of the Bonds and Parity Indebtedness so affected then Outstanding. However, without the consent of each Owner affected, no modification or alteration may (i) extend the maturity of the principal of, or interest on, any Bond or Parity Indebtedness, (ii) reduce the principal amount of, or rate of interest on, any Bond or Parity Indebtedness, (iii) effect a privilege or priority of any Bond or Bonds over any other Bond or Bonds, (iv) reduce the percentage of the principal amount of the Bonds or Parity Indebtedness required for consent to such modification or alteration, (v) if applicable, impair the exclusion of interest on any Bonds or Parity Indebtedness from gross income for purposes of federal income taxation, (vi) eliminate or extend the mandatory redemption date of any Bonds or Parity Indebtedness or reduce the redemption price of Bonds or Parity Indebtedness, (vii) create a lien ranking prior to or on a parity with the lien of the Master Indenture or (viii) deprive any Owner of the lien created by the Master Indenture on such property.

WATER UTILITY FUND FINANCIAL STATEMENTS
FOR THE YEAR ENDED JUNE 30, 2017

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Water Utility Fund

An Enterprise Fund of the City of Norfolk, Virginia

Financial and Compliance Report

Fiscal Year Ended June 30, 2017

Water Utility Fund
An Enterprise Fund of the City of Norfolk, Virginia
Financial and Compliance Report
Fiscal Year Ended June 30, 2017

Contents

KPMG LLP
Suite 1900
440 Monticello Avenue
Norfolk, VA 23510

Independent Auditors' Report

The Honorable Member of the City Council
City of Norfolk, Virginia:

Report on the Financial Statements

We have audited the accompanying financial statements of the Water Utility Fund of the City of Norfolk, Virginia (the Fund), as of and for the year ended June 30, 2017, and the related notes to the financial statements, which collectively comprise the Fund'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 U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express all opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, and the *Specifications for Audits of Counties, Cities, and Towns* (Specifications) issued by the Auditor of Public Accounts of the Commonwealth of Virginia. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the Water Utility Fund of the City of Norfolk, Virginia, as of June 30, 2017, and the respective changes in financial position, and where applicable, cash flows thereof for the year then ended in accordance with U.S. generally accepted accounting principles.

Emphasis of Matter

As discussed in note 1 to the basic financial statements, the accompanying financial statements present only the Water Utility Fund and do not purport to, and do not present fairly the financial position of the City of Norfolk, Virginia, the changes in its financial position or its cash flows, where applicable, in conformity with the U.S. generally accepted accounting principles.

Other Matters

Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis on pages 3 through 7, the schedule of funding in progress for Other Post-Employment Benefits Plans on page 28, schedule of contributions on page 29, and schedule of proportionate share of the net pension liability on page 30 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary and Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Fund's basic financial statements. The Supplemental Debt Capacity Information are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The Supplemental Debt Capacity Information 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 Supplemental Debt Capacity Information are fairly stated in all material respects in relation to the basic financial statements as a whole.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated December 15, 2017 on our consideration of the Fund'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 Fund'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 Fund's internal control over financial reporting and compliance.

KPMG LLP

Norfolk, Virginia
December 15, 2017

The following discussion and analysis of the Water Utility Fund of the City of Norfolk, Virginia's (the "Fund") financial performance provides an overview of the Fund's financial activities for the fiscal year ended June 30, 2017. The intent of the management discussion and analysis is to provide a summarized view of the Fund's financial performance and should be reviewed in conjunction with the basic financial statements and supporting notes for a complete understanding of the Fund's financial performance.

Financial Highlights for the Fiscal year 2017

- For the fiscal year ended June 30, 2017, the Fund has reported net operating revenues of $86,597,712, which represents an increase of 4.5% from fiscal year 2016 operating revenues.

- The Fund's operating expenses for fiscal year 2017 were $54,151,548, an increase of 11.14% from fiscal year 2016 operating expense.

- Total net position of $273,887,960 which is defined as total assets and deferred outflows of resources less total liabilities and deferred inflows of resources, includes net investment in capital assets of $208,228,611; restricted net position of $26,914,782 required by the Water Revenue Bonds Master Indenture of Trust as reserve funds for operating, repair and replacement, rate stabilization, and debt service; and $38,744,567 unrestricted net position as of June 30, 2017.

- The Fund's total cash and investments as of June 30, 2017 were $90,641,865 including restricted cash and investments.

- For fiscal year 2017, the Fund had total outstanding revenue bonds payable of $319,630,000. The total revenue bonds retired for fiscal year ended June 30, 2017 was $10,090,000.

Financial Statements Overview

The Fund's financial statements are reported on the full accrual basis as required by U.S. Generally Accepted Accounting Principles (GAAP) as prescribed by the Governmental Accounting Standards Board (GASB). These financial statements include, in addition to the management discussion and analysis, the basic financial statements and related notes and required supplementary information.

The basic financial statements are comprised of three statements, the statement of net position, the statement of revenues, expenses and changes in net position and the statement of cash flows.

The statement of net position presents information on all Fund assets, deferred outflows of resources, liabilities and deferred inflows of resources, with the difference reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the Fund is improving or deteriorating.

The statement of revenues, expenses and changes in net position presents information showing how net position changed during the most recent 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 related cash flows. Thus, revenues and expenses are reported in this statement for those items that will result in cash flows in future fiscal periods.

The statement of cash flows, when taken together with the statement of net position and statement of revenues, expenses, and changes in net position, provides the reader a complete "snapshot" of the financial condition and results of operations of the Fund as of June 30, 2017 and for the year then ended.

Notes to the financial statements are an integral part of the statements and should be read in conjunction with the financial statements and Management's Discussion and Analysis.

Financial Analysis

The following financial analysis provides insight into the factors that had a significant impact on the variance between fiscal years 2017 and 2016.

	2017	2016
Current assets	$ 106,561,151	$ 126,528,610
Capital assets	561,296,731	533,746,200
Deferred outflows of resources	13,296,390	10,658,063
Total assets and deferred outflows of resources	$ 681,154,272	$ 670,932,873
Current liabilities	$ 40,271,266	$ 28,855,093
Long-term liabilities	366,223,194	380,424,822
Deferred inflows of resources	771,852	1,087,890
Total liabilities	$ 407,266,312	$ 410,367,805
Net position:		
Net investment in capital assets	$ 208,228,611	$ 167,037,743
Restricted	26,914,782	24,288,204
Unrestricted	38,744,567	69,239,121
Total net position	$ 273,887,960	$ 260,565,068

Overall, total net position increased by approximately $13.3 million at June 30, 2017 as compared to June 30, 2016. Net investment in capital assets was 76.0% of the total net position at June 30, 2017. Restricted resources were 9.8% of the total net position. The remaining unrestricted resources of $38,744,567 may be used to meet to the Fund's ongoing obligations to citizens and creditors.

The table below provides a summary of the Fund's revenues, expenses and changes in net position for the years ended June 30, 2017 and 2016.

	2017	2016
Operating revenues, net	$ 86,597,712	$ 82,852,704
Operating expenses	54,151,548	48,722,032
Operating income	$ 32,446,164	$ 34,130,672
Non-operating revenues	$ 372,353	$ 291,984
Non-operating expenses	(19,684,101)	(19,234,268)
Total non-operating expenses	(19,311,748)	(18,942,284)
Net income before contributions	13,134,416	15,188,388
Capital contributions	188,476	337,654
Change in net position	$ 13,322,892	$ 15,526,042
Net position - beginning	260,565,068	245,039,026
Total net position - ending	$ 273,887,960	$ 260,565,068

For the fiscal year ending June 30, 2017, the Fund reported revenues of $86,970,065, expenses of $73,835,649, and net income before contributions of $13,134,416. The operating revenue increase of 4.5% is the result of expected increase in water rates and in line with the approved budgeted amount for the fiscal year ended June 30, 2017. For fiscal year ending June 30, 2017 operating expenses increased by 11.14% from fiscal year 2016.

A summary of the Fund's net capital assets at June 30, 2017 and 2016 were as follows:

Capital Assets	2017	2016
Land	$ 12,000,416	$ 11,756,368
Land improvements	15,053,010	15,458,260
Buildings	183,423,412	147,686,017
Equipment	305,920,140	293,433,010
Intangible assets	3,388,093	3,435,564
Construction in progress	41,511,660	61,976,981
	$ 561,296,731	$ 533,746,200

The Fund's capital assets totaled $561,296,731 (net of accumulated depreciation) and accounted for 84.0% of total assets at June 30, 2017. The net capital assets increased by $27,550,531 from the fiscal year 2016, representing assets placed in service of $62,345,434 and a decrease in construction in progress of $20,465,321, less the depreciation of assets in the amount of $13,476,128 and net disposals of $853,454. During fiscal year 2017, major capital projects spending included replacing and rehabilitating water mains, upgrading water treatment plants and pump stations, and designing and constructing dams and spillways.

Additional information on the Fund's capital assets can be found in Note 5 of the financial statements.

Debt Administration

As of June 30, 2017, the Fund had outstanding revenue bonds of $319,630,000. As of June 30, 2017, the Fund had unamortized bond premiums and discounts of $41,813,999. The total outstanding revenue bonds balance for years ending June 30, 2017 and 2016 were $361,443,999 and $375,548,681, respectively. The City of Norfolk (the "City") manages debt in accordance with the City's debt policies. Water revenue bond proceeds are used to finance capital projects that improve the City's water system. Water system revenue secures outstanding revenue bonds.

The table below is the latest credit rating for the Fund's water revenue bond programs as of the date of this report.

Bonding Program	Fitch Ratings	Standard and Poor's	Moody's Investors Service
Water Revenue	AA+	AA+	Aa2

Future Outlook

The Fund continues to support the City of Norfolk's long-term objective of being a well-managed government and strives to enhance quality of life by providing excellent Water services at the best value to the City's customers. The Fund aims its attention on exceeding customer expectations through fast, effective and courteous service, protecting natural resources and fostering a healthy, safe, and clean environment, and embracing new and better ways of achieving quality results through creativity, initiative and technology.

Contacting the Fund's Financial Management

This financial report is designed to provide our citizens, clients, and taxpayers with a general overview of the Fund's finances and to demonstrate the Fund's accountability for the money it receives. Questions concerning this report or requests for additional financial information should be forwarded to the Director of Department of Utilities, 401 Monticello Avenue, Suite 200, Norfolk, Virginia 23510.

Water Utility Fund
An Enterprise Fund of the City of Norfolk, VA
Statement of Net Position
June 30, 2017

ASSETS		
Current assets:		
Cash and short-term investments (Note 2)	$	63,727,083
Receivables:		
Accounts (net) (Note 3 and 8)		8,060,439
Unbilled accounts (Note 4 and 8)		4,720,212
Accrued investment income		5,693
Inventories		3,086,452
Restricted cash held in escrow (Note 2)		161,033
Restricted investment held with fiscal agent (Note 2)		11,891,698
Reserve funds (Note 2)		14,862,051
Prepaid Expenses		46,490
Total current assets		106,561,151
Non-current assets:		
Capital assets (Note 5):		
Non-depreciable assets		56,001,480
Depreciable assets		745,326,091
Accumulated depreciation and amortization		(240,030,840)
Capital assets, net		561,296,731
Total assets		667,857,882
Deferred outflows of resources		
Pensions (Note 7)		4,920,511
Loss on defeasance of bonds (Note 6)		8,375,879
Total deferred outflows		13,296,390
Total assets and deferred outflows of resources	$	681,154,272

(Continued)

Water Utility Fund
An Enterprise Fund of the City of Norfolk, VA
Statement of Net Position (Continued)
June 30, 2017

LIABILITIES		
Current liabilities:		
Vouchers payable	$	1,980,810
Vouchers payable for CIP projects		5,845,511
Contract retainage		1,675,248
Accrued payroll		242,426
Internal balances		12,950,430
Compensated absences		702,592
Current portion of bonds payable (Note 6)		13,860,000
Liabilities payable from restricted assets		2,620,905
Other current liabilities		393,344
Total current liabilities		40,271,266
Non-current liabilities:		
Revenue bonds payable (Note 6)		347,583,999
Net pension liability (Note 7)		16,034,871
Compensated absences		408,877
Liability for other post employment benefits (OPEB) (Note 12)		2,195,447
Total non-current liabilities		366,223,194
Total liabilities		406,494,460
Deferred inflows of resources		
Related to pensions (Note 7)		771,852
Total liabilities and deferred inflows of resources		407,266,312
NET POSITION		
Net investment in capital assets		208,228,611
Restricted		26,914,782
Unrestricted		38,744,567
Total net position	$	273,887,960

See Notes to Financial Statements

Water Utility Fund
An Enterprise Fund of the City of Norfolk, VA
Statement of Revenues, Expenses and Changes in Net Position
For the Year Ended June 30, 2017

Operating Revenues:		
Charges for services, net	$	84,529,095
Miscellaneous		2,068,617
Total operating revenues, net		86,597,712
Operating Expenses:		
Personnel services		15,257,947
Plant operations		6,728,352
Chemicals		2,948,324
Depreciation and amortization		13,476,128
Pension expense (Note 7)		2,072,580
OPEB expense (Note 12)		174,036
Administrative expenses		1,717,336
Other		11,776,845
Total operating expenses		54,151,548
Operating income (loss), net		32,446,164
Non-operating revenues (expenses):		
Interest income, net of interest capitalized		372,353
Interest expense and fiscal charges, net of interest capitalized		(10,317,548)
Gain (loss) on sale or disposal of capital assets		(850,426)
Miscellaneous revenue (expense)		(16,127)
Payments to General Fund		(8,500,000)
Total non-operating revenues (expenses)		(19,311,748)
Net income (loss) before contributions and transfers		13,134,416
Capital contributions		188,476
Changes in net position		13,322,892
Total net position - beginning		260,565,068
Total net position - ending	$	273,887,960

See Notes to Financial Statements

Water Utility Fund
An Enterprise Fund of the City of Norfolk, VA
Statement of Cash Flows
For the Year Ended June 30, 2017

Cash flows from operating activities:		
Receipts from customers	$	86,608,090
Payments to suppliers		(8,811,174)
Payments to employees		(17,503,169)
Other payments		(14,171,362)
Net cash provided by operating activities		46,122,385
Cash flows from non-capital financing activities:		
Internal activity, payments from other funds		8,302,506
Payments to general fund		(8,500,000)
Net cash used in non-capital activities		(197,494)
Cash flows from capital and relating financing activities:		
Contributed capital		188,476
Purchases of capital assets		(42,502,506)
Proceeds from sale of capital assets		3,028
Principal paid on capital debt		(10,090,000)
Interest paid (net of bond premium and related costs)		(13,951,097)
Net cash used in capital and related financing activities		(66,352,099)
Cash flows from investing activities:		
Proceeds from sale of investments		26,348,662
Purchase of investments		(28,991,367)
Interest and dividends		376,908
Net cash used in investing activities		(2,265,797)
Net decrease in cash and cash equivalents		(22,693,005)
Cash and short-term investments - beginning of year		86,420,088
Cash and short-term investments - end of year	$	63,727,083

(Continued)

Water Utility Fund
An Enterprise Fund of the City of Norfolk, VA
Statement of Cash Flows (Continued)
For the Year Ended June 30, 2017

Reconciliation of Operating Income to Net Cash		
Provided by operating activities:		
Operating income	$	32,446,164
Adjustments to reconcile operating income to net cash		
Provided by operating activities:		
Depreciation and amortization expense		13,476,128
Changes in assets and liabilities:		
Accounts receivable (net), billed and unbilled		10,378
Inventories		(135,186)
Vouchers payable		1,003,743
Accrued payroll		(80,801)
Net pension obligation		82,195
Other liabilities		(680,236)
Net cash provided by operating activities	$	46,122,385
Non-cash investing, capital, and financing activities:		
Unrealized loss on investments	$	(16,127)
Loss on sale or disposal of capital assets	$	(850,426)
Acquisition of capital assets through change in contract retainage	$	154,221
Acquisition of capital assets through change in vouchers payable	$	(776,614)
Capitalized interest	$	1,969,078
Decrease in deferred inflows through change in pension obligation	$	316,038

See Notes to Financial Statements

Note 1. Summary of Significant Accounting Policies

The Water Utility Fund (the "Fund") was established at the direction of Norfolk City Council as an enterprise fund on July 1, 1979. The Fund accounts for the provision of water services to City of Norfolk (the "City") residents, municipal customers and others outside the City. Activities necessary to provide water services, including operations, maintenance, financing and related debt service, and billing and collection, are accounted for in the Fund. Although separate financial statements have been presented for the Fund, it is also included in the City of Norfolk's Comprehensive Annual Financial Report as a major Enterprise Fund. These financial statements are those of the Fund and not of the City of Norfolk, Virginia as a whole.

A summary of the Fund's significant accounting policies is as follows:

Basis of accounting: The accounting policies of the Fund are based upon accounting principles generally accepted in the United States of America as prescribed by the Governmental Accounting Standards Boards (GASB). The financial statements are presented on the accrual-basis of accounting, wherein revenue is recognized in the accounting period in which it is earned and expenses are recognized in the accounting period in which the related liabilities are incurred.

Deposits and Investments: The Fund's cash and short-term investments include cash on hand, demand deposits, and short-term investments with original maturities of one year or less from the date of acquisition.

Investment statutes authorize the Fund to invest in obligations of the United States or agencies thereof, obligations of the Commonwealth of Virginia or political subdivisions thereof, obligations of the International Bank for Reconstruction and Development (World Bank) and Asian Development Bank, commercial paper rated A-1 by S & P Global Ratings or P-1 by Moody's Commercial Paper Record, bankers' acceptances, repurchase agreements, Virginia State Non-Arbitrage Program (SNAP) and the State Treasurer's Local Government Investment Pool (LGIP). SNAP and LGIP investments are valued at amortized costs and qualify as external investment pools per GASB 79, Certain External Investment Pools and Pool Participants. The LGIP and SNAP are not registered with the Securities and Exchange Commission (SEC) as an investment company, but maintain a policy to operate in a manner consistent with the SEC's Rule 2a7 of the Investment Company Act of 1940.

The Fund has no formal policy regarding credit risk, interest rate risk, concentration of credit risk, custodial credit risk, or foreign investment risk.

The majority of the Fund's cash and short-term investments are pooled with the City. The City uses the pooled cash investment method, under which income from the investment of pooled cash is allocated to the various funds based on the percentage of cash and temporary investments of each fund to the total pooled cash and temporary investments. For purposes of the statement of cash flows, all highly liquid debt instruments with a maturity of 90 days or less and certificates of deposit are grouped into cash and short-term investments. The cash and investment pool discussed above is considered cash, since it has the same characteristics as a demand account.

All investments of the fund are interests in external investment pools as defined by GASB Statement No. 79, Certain External Investment Pools and Pool Participants, and as a result are carried at amortized cost. These external investment pools are administered by the Treasury of Virginia.

Note 1. Summary of Significant Accounting Policies (Continued)

Accounts receivable: Accounts receivable are receivables due at the end of the fiscal year which have not been collected by year-end, net of allowance for doubtful accounts. The Fund determines past due status of individual water account receivables based on contractual terms and generally does not charge interest on past-due amounts. The Fund estimates its allowance for doubtful accounts based on a combination of factors, including the Fund's historical loss experience and any anticipated effects related to current economic conditions, as well as management's knowledge of the current composition of water receivables. Accounts that management believes to be ultimately uncollectible are written off upon such determination and approval by the City Council. Unbilled accounts, net, are estimated at each fiscal year-end based on water usage by customers for whom billings have not yet been processed.

Amounts for provision for bad debt are recorded as an offset to the operating revenue.

Inventories: Inventories are stated at cost using the moving average method. The Fund expenses inventories when consumed.

Restricted assets: Certain unspent proceeds of revenue bonds as well as certain resources set aside for their repayment are classified as restricted on the Statement of Net Position because they are maintained in separate bank accounts and their use is limited by applicable bond covenants.

Capital assets: Capital assets are recorded at historical cost, less accumulated depreciation. Assets acquired prior to July 1977, for which historical cost records were not available, were appraised and valued at estimated historical cost by means of accepted price indexing methodology.

Capital assets are defined by the Fund's capitalization policy as assets owned by the City with an initial, individual cost of more than $5,000 and an estimated useful life greater than one year.

Depreciation: Depreciation is computed using the straight-line method over the following estimated useful lives:

Buildings and improvements	35 - 100
Transmission and distribution mains	40 - 100
Service meters and meter installation	35 - 50
Pumping and other water equipment	10 - 60
Furniture, fixtures and equipment	5 - 25
Intangible Assets	5 - 10

When an asset is retired or otherwise disposed of, the related cost and accumulated depreciation are eliminated from the accounts and any resulting gain or loss is reflected as non-operating revenue or expense.

Interest costs incurred on funds borrowed for construction projects are capitalized, net of interest earned on the temporary investment of the unexpended portion of those funds.

Note 1. Summary of Significant Accounting Policies (Continued)

The Fund evaluates prominent events or changes in circumstances affecting capital assets to determine whether impairment of a capital asset has occurred. A capital asset is generally considered impaired if both (a) the decline in service utility of the capital asset is large in magnitude and (b) the event or change in circumstance is outside the normal life cycle of the capital asset. Impaired capital assets that will no longer be used by the Fund are reported at the lower of carrying value or fair value. Impairment losses on capital assets that will continue to be used by the Fund are measured using the method that best reflects the diminished service utility of the capital asset. Any insurance recoveries received as a result of impairment events or changes in circumstances resulting in the impairment of a capital asset are netted against the impairment loss. No impairment of assets was recorded in 2017.

Compensated absences: It is the Fund's policy to permit employees to accumulate earned but unused vacation and sick pay benefits. Vacation leave is fully vested when earned by Fund employees. Accumulated vacation leave cannot exceed certain limits as codified in Section 2-49 in the City Code of Ordinances. Sick leave does not vest for Fund employees; however, upon retirement, Fund employees receive credit for each day of accumulated sick leave toward their pension benefit. There is no liability for unpaid accrued sick leave service since the Fund does not pay when the employee separates from service. The additional retirement benefit is included in the Fund's pension liability.

Net position: Net position in the financial statements is classified as invested in capital assets, net of related debt; restricted; and unrestricted. Restricted net position represents constraints on resources that are either externally imposed by creditors, grantors, contributors, laws and regulations of other governments or imposed by law through state statutes. When both restricted and unrestricted resources are available for use, the policy is to use restricted resources first and then unrestricted resources as they are needed.

Operating and non-operating revenues: The Fund reports as operating revenues all charges for services generated through service fees and certain other miscellaneous revenues. Other revenues, including interest revenue and grants, are reported as non-operating.

General allocations: The General Fund of the City provides administrative services to the Fund, which totaled $2,308,996 for the fiscal year ended June 30, 2017. Charges for these services are treated as expenses by the Fund. In addition, the Fund recorded, as other expenses, payments to the General Fund in lieu of taxes of $2,939,677 for the fiscal year ended June 30, 2017.

Bond discount, premium, issuance costs and gain or loss on defeasance: Bond premiums and discounts are deferred and amortized over the life of the bonds using the effective interest method. The amortization amounts of bond premiums and discounts are included in interest expense. Bonds payable are reported net of the applicable bond premium or discount. Bond issuance costs are expensed in the period incurred.

In accordance with GASB 65 *Items Previously Reported as Assets and Liabilities*, loss on defeasance from bond refunding is reported as deferred outflows of resources and gain on defeasance from bond refunding is reported as deferred inflows of resources in the Fund's financial statements. They are amortized using the straight line method over the term of the debt.

Estimates: The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Note 1. Summary of Significant Accounting Policies (Continued)

Deferred inflows and outflows of resources: The Fund reports deferred inflows and outflows on its statement of net position. Deferred inflows arise when potential revenue does not meet the "measurable" and "available" criteria for recognition in the current period. Deferred outflows represent a consumption of net position in a future period. The Fund reports the gains and losses on defeasance from debt refunding and certain components of net pension liability as deferred inflows and outflows.

Pension plan: For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pension, and pension expense, information about the fiduciary net position and the additions and deductions there to, of the City of Norfolk Employees' Retirement Plan (ERS) have been determined on the same basis as they were reported by the respective plan. With the exception of deferred outflows related to employer contributions made after the measurement date, deferred inflows and outflows are amortized over a closed five-year period or the average remaining service life of the effected employees. Deferred outflows of resources related to employer contributions made after the measurement date will be recognized as a reduction of the net pension liability in the next fiscal year. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. The allocation of proportionate shares of the ERS net pension liability and other pension amounts to participating funds is based on employer contributions.

Note 2. Deposits and Investments

Custodial credit risk - deposits: All deposits of the Fund are maintained in accounts collateralized in accordance with the Virginia Security for Public Deposits Act, Section 2.2-4400 et. seq. of the Code of Virginia or covered by federal depository insurance. Under the Act, any public depository that receives or holds public deposits ("Qualified Public Depositories") shall elect to secure deposits by either the Pooled Method or the Dedicated Method (which became available by amendments made to the Act effective July 1, 2010). The Pooled Method requires any public depository that receives or holds public deposits to pledge collateral, ranging from 50 to 100 percent of the public deposits, to the State Treasury Board to cover public deposits in excess of Federal deposit insurance. The Pooled Method also provides that if any member financial institution fails, the entire collateral pool becomes available to satisfy the claims of participating governmental entities. If the value of the pool's collateral were inadequate to cover a loss, additional amounts would be assessed on a pro rata basis to members of the pool. Under the Dedicated Method, Qualified Public Depositories are responsible for securing their own public deposits, by the pledge and deposit of eligible collateral with a qualified escrow agent, equal to or in excess of required collateral amounts, priced at a minimum of 105 percent to 130 percent of all public deposits held by the bank, based on rating determined under the Act; and therefore will not be assessed for losses of another bank that is in default or has become insolvent.

The State Treasury Board is responsible for monitoring compliance with the collateralization and reporting requirements of the Act and for notifying local governments of compliance by banks. Both methods of securing public deposits are similar to depository insurance. Funds deposited in accordance with the Act are considered to be fully insured. The City's primary banking institution has elected to be governed by the Dedicated Method.

Custodial credit risk – investments: For an investment, custodial credit risk is the risk that, in the event of the failure of the counterparty, the Fund will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. The Fund has no formal policy regarding custodial credit risk for investments.

Note 2. Deposits and Investments (Continued)

At June 30, 2017, the Fund's deposits and investments consisted of the following:

	2017
Cash, including pooled cash with City of Norfolk	$ 43,465,723
External investment pools	47,176,142
	$ 90,641,865

Cash and short term investments	$ 63,727,083
Restricted cash held in escrow	161,033
Restricted short term investments held with fiscal agent	11,891,698
Reserve funds	14,862,051
	$ 90,641,865

Credit risk related to issuer: Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The Fund's fixed income investments as of June 30, 2017 were rated by Standard and Poor's and the ratings are presented below using the Standard and Poor's rating scale.

Investment Type	AA+	AAAm	Total
SNAP US Agency Notes	3,743,156	-	3,743,156
PFM Funds Government Series	-	11,891,698	11,891,698
LGIP		31,541,288	31,541,288
	$ 3,743,156	$ 43,432,986	$ 47,176,142

Note 2. Deposits and Investments (Continued)

Fair Value Measurement: The Fund discloses the fair values of its investments in a hierarchy that prioritized the inputs to valuation techniques used to measure fair value. GAAP requires that investments be measured and reported at fair market value and the disclosure of inputs used in the valuation process. The hierarchy gives the highest priority to valuations based upon unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurements) and the lowest priority to valuations based upon unobservable inputs that are significant to the valuation (level 3 measurements). The guidance established three levels of the fair value hierarchy as follows:

- Level 1 — Quoted prices in active markets for identical assets. Equity securities are priced using an exchange traded price or a broker quote in an active market.
- Level 2 — Inputs other than quoted prices that are observable for the asset, including quoted prices for similar investments based on interest rates, credit risk and alike factors. The United States treasury and fixed income securities are priced using pricing models based on a compilation of primarily observable market information or a broker quote in a non-active market for an identical or similar security. The certificate of deposit is valued based on discounted cash flows using current interest rates at the stated maturity. The short term investment trades daily without restriction at $100 per unit.
- Level 3 — Unobservable inputs for the assets, including the fund's own assumptions for determining fair value.

Portfolio investments are assigned a level based upon the observability of the inputs which are significant to the overall valuation. The inputs or methodology used for valuing securities are not necessarily an indication of the risk associated with investing in those securities.

External investment pools include the PFM, LGIP and SNAP investments. These investments are reported at amortized cost in accordance with Rule 2a7, and qualify as external investment pools per GASB 79, *Certain External Investment Pools and Pool Participants*. Because they are not carried at fair value, they have not been assigned a level. The Fund's investments in external investment pools at June 30, 2017 are reflected above in this note.

Note 3. Accounts Receivable

Accounts receivable at June 30, 2017 were comprised of the following:

	2017
Governmental	$ 2,698,923
Residential	3,177,463
Commercial	1,211,418
Utility taxes	757,200
Industrial	291,432
Other	1,623,520
	9,759,956
Less allowance for uncollectible accounts	(1,699,517)
	$ 8,060,439

Note 3. Accounts Receivable (Continued)

The Fund recorded $19,059 as provision for bad debts which was offset against the operating revenue for the fiscal year ended June 30, 2017.

Note 4. Unbilled Accounts Receivable

At June 30, 2017, the Fund recognized $4,720,212 as unbilled accounts receivable. These amounts were billed in July 2017.

Note 5. Capital Assets

Capital assets at June 30, 2017 were comprised of the following:

Non-depreciable assets:	Balance June 30, 2016	Additions	Retirements / Transfers	Balance June 30, 2017
Land	$ 11,756,368	$ 244,048	$ -	$ 12,000,416
Intangible assets	2,489,404	-	-	2,489,404
Construction in progress	61,976,981	41,810,704	(62,276,025)	41,511,660
Total non-depreciable assets	76,222,753	42,054,752	(62,276,025)	56,001,480
Depreciable & amortized assets:				
Land improvements	20,787,445	-	-	20,787,445
Buildings	205,466,194	40,103,583	(1,879,418)	243,690,359
Equipment	452,716,992	21,658,290	(325,244)	474,050,038
Intangible assets	6,482,030	339,513	(23,294)	6,798,249
Total depreciable & amortized assets	685,452,661	62,101,386	(2,227,956)	745,326,091
Less accumulated depreciation for				
Land improvements	(5,329,185)	(405,250)	-	(5,734,435)
Buildings	(57,780,177)	(3,539,028)	1,052,258	(60,266,947)
Equipment	(159,283,982)	(9,144,866)	298,950	(168,129,898)
Intangible assets	(5,535,870)	(386,984)	23,294	(5,899,560)
Total accumulated depreciation	(227,929,214)	(13,476,128)	1,374,502	(240,030,840)
Depreciable assets, net	457,523,447	48,625,258	(853,454)	505,295,251
Total capital assets, net	$533,746,200	$ 90,680,010	$(63,129,479)	$561,296,731

The Fund capitalized interest of $1,969,078 which consisted of $2,037,629 of interest expense and $68,551 of interest income for the fiscal year ended June 30, 2017. The total interest cost was $12,355,177 for the fiscal year ended June 30, 2017.

Note 6. Long-Term Obligations

Revenue bonds: A summary of revenue bond transactions for the fiscal year ended June 30, 2017 follows:

	2017
Revenue bonds outstanding at July 1	$ 329,720,000
Bonds retired	(10,090,000)
Bonds outstanding at June 30	319,630,000
Unamortized discount/premium, net	41,813,999
Revenue bonds outstanding at June 30, adjusted for unamortized discount/premium	361,443,999
Less current portion	(13,860,000)
	$ 347,583,999

Water utility revenue bonds outstanding are comprised of the following individual issues:

Bond Issue/Purpose	Dated	Issue Amount	Interest Rate	2017
Series 2008 Water Revenue	4/23/2008	58,415,000	5.00%	$ 2,640,000
Series 2010 Water Revenue	9/30/2010	47,415,000	2.50 - 4.50%	41,635,000
Series 2012 Water Revenue Refunding	4/4/2012	176,925,000	5.00%	148,605,000
Series 2013 Water Revenue	2/20/2013	43,070,000	5.00%	43,070,000
Series 2015A	4/16/2015	29,660,000	5.25%	29,660,000
Series 2015B Refunding	4/16/2015	54,020,000	5.00-5.25%	54,020,000
Total Water Utility Revenue Bonds				$ 319,630,000

A summary of the requirements to amortize water revenue bonds outstanding at June 30, 2017 is as follows:

Year Ending June 30,	Principal	Interest
2018	$ 13,860,000	$ 15,405,600
2019	14,200,000	14,714,975
2020	13,830,000	14,025,550
2021	15,965,000	13,292,450
2022	17,170,000	12,485,575
2023-2027	86,890,000	48,922,424
2028-2032	52,020,000	32,060,413
2033-2037	40,905,000	21,251,619
2038-2042	39,185,000	11,295,806
2043-2047	25,605,000	2,058,838
	$ 319,630,000	$ 185,513,250

Note 6. Long-Term Obligations (Continued)

Water revenue bonds are payable solely from the revenue of the Fund. The most restrictive covenant of the water revenue bonds requires that the Fund's net revenue to be not less than the greater of (i) the sum of 1.1 times senior debt service and 1.0 times subordinated debt service for the fiscal year or (ii) 1.0 times the funding requirements for transfers from the Revenue Fund to the Operating Fund, the Bond Fund, the Parity Debt Service Fund, the Debt Service Revenue Fund, the Subordinated Debt Service Fund and the Repair and Replacement Reserve Fund, and the Rate Stabilization Fund. Pursuant to the terms of the revenue bond indenture, certain resources have been set aside for the repayment of the revenue bonds. These resources are classified as restricted cash and investments held with fiscal agent on the Statement of Net Position because their use is limited by applicable bond covenants.

As of June 30, 2017, the total deferred outflows on bond refunding was $8,375,879. The amortization expense for the year ended June 30, 2017 was $464,346.

Bonds authorized and unissued as of June 30, 2017 were $64,522,116.

Note 7. Employees' Retirement System (ERS)

Plan description: The ERS is the administrator of a single-employer contributory, defined benefit plan (the Plan) that covers substantially all employees of the City, excluding School Board employees and Constitutional Officers' employees who are covered by the Virginia Retirement System (VRS). The ERS provides retirement benefits, as well as death and disability benefits. Cost-of-living adjustments ("COLAs") are not required, are not regularly instituted and are available solely at the discretion of the City Council. The ERS and its benefits are established by Chapter 37 of the Code of the City of Norfolk, Virginia, as amended. ERS pension expenses and liabilities are allocated to the Fund based on the employer's contribution to the Plan.

Plan benefits: The ERS provides retirement benefits, as well as death and disability benefits. All benefits vest after five years of creditable service. Employee eligibility requirements are as follows:

Retirement (for employees who became members prior to July 1, 1980): Normal retirement is the earlier of age 60 or after completion of 30 years of credited service. The normal service retirement benefit per annum is equal to 2.0% of average final compensation (average of the three highest years of compensation) times years of creditable service, with service limited to 35 years.

Retirement (for employees who became members on or after July 1, 1980): Normal retirement is the earlier of age 60 or after completion of 30 years of credited service. The normal service retirement benefit per annum is equal to 1.75% of average final compensation times years of creditable service, with service limited to 35 years. There is no mandatory retirement age.

Effective December 13, 2011, all employees hired on or after December 2011 are required to meet the vesting requirement of five years in order to be eligible to receive benefits under the Plan.

Contributions: Section 37 of the Code of the City of Norfolk, Virginia, established the authority under which the City's obligation to contribute to the Plan is determined. Contribution requirements are actuarially determined at the end of each fiscal year and paid by the City in the ensuing year. Effective January 8, 2015, all Plan members pay contribution on a salary reduction basis in the amount of 5.00% of earnable compensation, with the exception of the City Council members hired before October 5, 2010. Total employer contributions made by the Fund to the ERS plan were $1,990,385 for the year ended June 30, 2017. These contributions combined with employee contributions of $499,390 for the year ended June 30, 2017 were expected to cover the actuarially determined contributions.

Note 7. Employees' Retirement System (ERS) (Continued)

Actuarial assumptions: The actuarial assumptions are based on the presumption that the ERS will continue indefinitely. Were the ERS to terminate, different actuarial assumptions and other factors might be applicable in determining the actuarial accrued liability.

For the June 30, 2016 actuarial valuation, the actuarial assumptions include the following:

Actuarial cost method:	Entry Age Normal Cost Method
Amortization method:	Level percent closed, 20-years layers
Amortization growth rate:	3.00%
Asset valuation method:	3-year Smoothed Value
Inflation rate:	3.00%
Salary increases-general employees:	Average annual salary increases of 5.64% over a 30-year career; based on rates that vary by years of service and are compounded annually
Investment rate of return:	7.07%
Mortality:	RP-2000 Combined Healthy Mortality projected to 2010 by Scale AA for health lives RP-2000 Disabled Mortality projected to 2010 by Scale AA for disable lives

The long-term expected rate of return on the ERS investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan 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 allocation and best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2016, are summarized in the following table:

Asset Class	30-year 2016 Long-term Expected Real Rate of Return	Target Allocations
Private Core Real Estate	4.75%	7.5%
Master Limited Partnerships	6.50%	7.5%
Core Fixed Income	1.00%	30.0%
Core Plus Income	1.50%	0.0%
Equity (ACWI IMI)	5.15%	55.0%
		100.00%

Note 7. Employees' Retirement System (ERS) (Continued)

Discount rate: The discount rate used to measure the total pension liability was 7.07%. The projection of cash flows used to determine the discount rate assumed that Plan member contributions will be made at the current contribution rate and that City contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. The GASB 67 depletion schedule, as prepared by the actuary based on those assumptions was presented for 99 years. The projected benefit payments ended by fiscal year end 2099 and the pension plan's fiduciary net position was projected to be available to make projected future payments and pay administrative expenses until fiscal year 2075. Projected benefit payments are discounted at the long-term expected return of 7.07% (net of investment expenses) to the extent the fiduciary net position is available to make the payments and at the municipal bond rate of 2.85% to the extent they are not available. The single equivalent rate to determine the total pension liability as of the measurement date of June 30, 2016 was 7.07%.

Net pension liability: The net pension liability was measured as of June 30, 2016 with an actuarial valuation date of June 30, 2016. Pension expense and liability are allocated to governmental and enterprise funds based on the actual employer contributions. The employer contributions made in fiscal year 2017 of $1,990,385 are included as deferred outflows. As of June 30, 2017, the Fund reported a net pension liability of $16,034,871 for its proportionate share of the collective net pension liability of the ERS plan. The net pension liability is allocated based on employer's contributions during the measurement period. At June 30, 2016, the Fund's proportion was 5.91% as compared to 5.93% at June 30, 2015.

Sensitivity of the net pension liability to changes in the discount rate: The following presents the Fund's proportionate share of the net pension liability, calculated using the discount rate of 7.0%, as well as what the Fund's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.07%) or 1-percentage-point higher (8.07%) than the current rate:

	1.00% Decrease (6.07%)	Current Discount Rate (7.07%)	1.00% Increase (8.07%)
ERS Net Pension Liability	$ 23,822,719	$ 16,034,871	$ 9,393,947

Pension expense and deferred inflows and outflows of resources related to the ERS Pension: Total Pension expense for the Fund is $2,072,580. At June 30, 2017, deferred inflows (outflows) reported in the Fund's financial statements are as follows:

	Deferred Inflows (Outflows) of Resources
Net difference between expected and actual experience	$ 464,119
Change in assumptions	307,733
Net difference between projected and actual earnings on plan investments	(2,904,537)
Net change in proportionate share	(25,589)
	$ (2,158,274)

Note 7. Employees' Retirement System (ERS) (Continued)

Deferred outflows related to pension contributions made after the measurement date by the Fund of $1,990,385 will be recognized as a reduction of the net pension liability in the year ended June 30, 2018. Other amounts related to deferred inflows (outflows) of resources will be recognized in pension expense as follows:

Year	Amortization of Deferred Inflows (Outflows)
2018	$ (89,664)
2019	(89,664)
2020	(1,307,930)
2021	(671,016)
2022	-
	$ (2,158,274)

Note 8. Significant Customers

Billed and unbilled accounts receivable included the following amounts related to significant customers as of June 30, 2017:

	2017	% of Total Accounts Receivables
City of Virginia Beach	$ 2,062,825	16%
United States Navy	947,704	7%
Chesapeake	746,359	6%
WTWA	521,494	4%
	$ 4,278,382	

Net charges for services for the years ending June 30, 2017 include the following:

	2017	% of Total Charges for Service
City of Virginia Beach	$ 24,721,565	29%
United States Navy	11,709,968	14%
Chesapeake	8,401,234	10%
WTWA	3,128,963	4%
	$ 47,961,730	

Note 9. Commitments and Contingencies

Commitments for completion of capital projects authorized at June 30, 2017 were approximately $19,696,704.

Note 10. Litigation

From time-to-time the Fund is a defendant in a number of lawsuits. Although it is not possible to determine the final outcome of these matters, management and the City Attorney are of the opinion that the ultimate liability will not be material and will not have a significant effect on the Fund's financial condition.

Note 11. Risk Management

The Fund is exposed to various risks of loss related to: theft of, damage to, and destruction of assets; injuries to employees; general liability; automobile liability; crime and employee dishonesty; professional liability; and directors' and officers' liability. The Fund's coverage is provided through the City's combination of purchased insurance policies and self-insurance plans.

Note 12. Other Postemployment Benefits (OPEB)

Plan description: The City provides post-retirement health care benefits, in accordance with adopted statutes, which require extending access to healthcare benefits to certain retirees. General City employees are eligible to participate at the earlier of age 55 and 15 years of creditable service or 25 years of creditable service. Employees who retire on accidental disability are also eligible. Retirees that elect to participate may purchase health care coverage using the same health care plans and premium structures available to active employees. Retiree participation, plan/benefit elections and contributions are administered by the City's Retirement Bureau based on the participation guidelines established by the Norfolk City Council. Benefits are currently managed on a pay-as-you-go basis rather than use of an irrevocable trust and a separate financial report of the OPEB Plan is not issued. The Plan is considered a single-employer plan.

Funding Policy: No employee contributions are required prior to retirement to participate in or fund the OPEB Plan. The City committed to a set contribution amount as an explicit subsidy of $25 or $35 per month for the City per participating retiree. Effective January 1, 2014, the City eliminated healthcare coverage for post 65 retirees (e.g. retirees eligible for Medicare) along with the $25 or $35 monthly subsidy. The pre-65 retirees will continue to receive the subsidy and will participate in the consortium with the active employees. Retirees may not convert the benefit into an in-lieu payment to secure coverage under independent plans. The Plan sponsors also pay an implicit subsidy by allowing retirees to participate in the same benefit plans under the same premium structure as available to active employees, however, the Plan sponsors are not required to fund the plan other than the pay-as-you-go amount necessary to provide current benefits to employees.

The annual required contribution was determined as part of the July 1, 2016 actuarial valuation using the entry age normal actuarial cost method. The amortization method is level percent open. The actuarial assumptions included: (a) 2.85% percent investment rate of return and (b) projected salary increases of 3.50% per year. Both (a) and (b) include a medical inflation component of 7.80% (pre-Medicare) grading to 3.0% over 19 years. The actuarial value of the City's assets is equal to the market value of assets. The remaining amortization period is a rolling 30 years.

Annual OPEB cost and net OPEB obligation: The City's annual OPEB cost (expense) is calculated based on the annual required contribution (ARC), an amount actuarially determined in accordance with GASB Statements No. 43 and 45. Under these Statements, governments report on an accrual basis, benefit costs related to the period in which benefits are earned rather than to the period of benefit distribution. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal costs each year and amortize any unfunded actuarial liabilities over a period not to exceed thirty years.

Note 12. Other Postemployment Benefits (OPEB) (Continued)

The total unfunded actuarial accrued liability (UAAL) for 2017 is $1,728,016, and is allocated to the Fund on the same basis as the ARC. The allocation is based on covered payroll and does not purport to represent the OPEB liability of the Fund on a stand-alone basis. Reference should be made to the Comprehensive Annual Financial Report of the City of Norfolk for further information.

The Fund and the City use the pay as you go method to calculate the OPEB liability for June 30, 2017 as the City has not funded a trust for the OPEB liability. Using the most recent OPEB plan valuation date of July 1, 2016, the following table shows the components of the Fund's annual OPEB costs projected for the current fiscal year, the amount contributed to the Plan and the changes in the net OPEB obligation:

	2017
Net beginning OPEB obligation	$ 2,021,411
Annual required contributions	209,956
Interest on net OPEB obligation	59,980
Adjustment to ARC	(65,755)
Annual OPEB cost	204,181
Less: contributions made	30,145
Increase in net OPEB obligation	174,036
Net ending OPEB obligation	$ 2,195,447

Actuarial methods and assumptions: Projections of benefits for financial reporting purposes are based on the plan and include the types of benefits provided at the time of each valuation. The actuarial methods and assumptions used include techniques designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

The actuarial valuation was performed as of July 1, 2016 with results projected for the fiscal year ended June 30, 2017. The entry age normal actuarial cost method was used with a level percent open amortization method over 30 years. A discount rate of 2.85% was used. Annual rates of health care inflation used were 7.8 % (pre-Medicare) grading to 3.00% over 19 years and the annual rate of salary increases used was 3.50%.

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events in the future. Actuarial valuations are subjected to continual revisions as actual results are compared to past expectations and new estimates are made about the future.

Note 13. Accounting Pronouncements Issued but not yet Implemented

The GASB has issued several pronouncements that may impact future financial presentations. Management has not determined what, if any, impact implementation of the following statements will have on the City.

Note 13. Accounting Pronouncements Issued but not yet Implemented (Continued)

- GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions.* This statement applies to government employers who provide OPEB plans to their employees and basically parallels GASB Statement 68 and replaces GASB Statement 45. This statement requires governments to report a liability on the face of the financial statements for the OPEB that they provide. The statement is effective for fiscal years beginning after June 15, 2017.

- GASB Statement No. 83, *Certain Asset Retirement Obligations.* This statement establishes criteria for determining the timing and pattern of recognition of a liability and a corresponding deferred outflow of resources for asset retirement obligations. This Statement is effective for reporting periods beginning after June 15, 2018.

- GASB Statement No. 84, *Fiduciary Activities.* 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 by establishing criteria for identifying fiduciary activities of all state and local governments. The requirements of this Statement are effective for reporting periods beginning after December 15, 2018.

- GASB Statement No. 85, *Omnibus 2017.* This Statement addresses practice issues that have been identified during the implementation and application of certain GASB statements including topics related to blending component units, goodwill, fair value measurement and postemployment benefits. The requirements of this Statement are effective for reporting periods beginning after June 15, 2017.

- GASB Statement No. 86, *Certain Debt Extinguishment Issues.* The primary objective of this Statement is to improve consistency in accounting and financial reporting for in-substance defeasance of debt by providing guidance for transactions in which monetary assets acquired with only existing resources are placed in an irrevocable trust for the sole purpose of extinguishing debt. This Statement also improves accounting and financial reporting for prepaid insurance on debt that is extinguished. The requirements of this Statement are effective for reporting periods beginning after June 15, 2017.

- GASB Statement No. 87, *Leases*. The objective of this Statement is to improve accounting and financial reporting for leases 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. The requirements of this Statement are effective for reporting periods beginning after December 15, 2019.

Supplemental Other Post Employment Benefit (OPEB)
Schedule of Funding Progress
Last Three Fiscal Years
(Unaudited)

Actuarial valuation date	Actuarial value of assets (a)	Actuarial accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Estimated covered payroll (c)	UAAL as a percentage of covered payroll (b-a)/c
July 1, 2016	$ -	$ 1,728,016	$ 1,728,016	0%	$ 11,251,185	15.4%
July 1, 2015	-	2,045,442	2,045,442	-	10,650,843	19.2%
July 1, 2014	-	2,219,840	2,219,840	-	10,450,056	21.2%

City of Norfolk
Norfolk Employee Retirement System
Schedule of Employer Contributions(unaudited)
Last 10 Fiscal Years
(Amounts in thousands)

Fiscal Years	Actuarially Determined Required Contributions*	Employer Contributions*	Contribution Deficiency (Excess)	Employer's Covered Employee Payroll**	Contributions as a % of Covered Employee Payroll
2017	$ 1,990	$ 1,990	$ -	$ 11,188	17.79%
2016	1,818	1,818	-	10,580	17.18%
2015	2,268	2,071	197	10,576	19.58%
2014	2,269	2,269	-	10,434	21.75%
2013	2,428	2,428	-	10,381	23.39%
2012	2,630	2,630	-	11,136	23.62%
2011	2,770	2,770	-	10,862	25.50%
2010	2,171	2,171	-	10,498	20.68%
2009	1,697	1,697	-	9,793	17.33%
2008	1,496	1,496	-	10,122	14.78%

* The actuarially determined contribution and the employer contributions were adjusted for years prior to 2014 to retrospectively apply the timing of recognition under GASB 67.

** The actuarial determination of the ADC is based on the projection of covered payroll for the period for which the ADC will apply. The covered-employee payroll was provided by the actuary.

City of Norfolk
Norfolk Employee Retirement System
Water Utility Fund
Schedule of Proportionate Share of the Net Pension Liability (unaudited)
For the Last Three Fiscal Years
(Amounts in thousands)

Fiscal Years	Proportionate Share as a percent of Employer Contribution	Proportionate Share of the Net Pension Liability	Employer's Covered Employee Payroll**	Proportionate Share of Net Pension Liability as a percent of Covered Payroll	Plan Fiduciary Net Position as a percent of Total Pension Liability
2017	5.91%	$ 16,035	$ 10,580	151.56%	78.22%
2016	5.93%	$ 12,534	$ 10,576	118.51%	82.74%
2015	5.80%	$ 9,673	$ 10,434	92.71%	86.53%

** The actuarial determination of the ADC is based on the projection of covered payroll for the period for which the ADC will apply. The covered-employee payroll was provided by the actuary.

This schedule is intended to show information for 10 years. Since 2015 was the first year for presentation, no other data are available. However, additional years will be included as they become available.

Debt Capacity Information - Revenue Bonds Debt Service Coverage
Last Ten Fiscal Years

Fiscal Year	Revenue Available for Debt Service (1)	Operating Expenses Less Depreciation / Amortization and PILOT (2)	Income Available for Debt Service	Debt Service Principal	Interest	Total	Coverage
2008	78,730,024	37,026,528	41,703,496	7,665,000	14,022,200	21,687,200	1.92
2009	78,020,552	38,182,373	39,838,179	8,050,000	16,411,343	24,461,343	1.63
2010	82,470,020	34,567,741	47,902,279	9,420,000	15,929,680	25,349,680	1.89
2011	83,737,444	37,068,753	46,668,691	9,875,000	16,527,844	26,402,844	1.77
2012	81,295,219	34,667,524	46,627,695	11,285,000	11,184,363	22,469,363	2.08
2013	80,091,220	34,810,702	45,280,518	7,000,000	14,700,777	21,700,777	2.09
2014	82,078,002	34,466,877	47,611,125	7,250,000	15,630,219	22,880,219	2.08
2015	85,490,793	33,940,277	51,550,516	7,805,000	13,905,866	21,710,866	2.37
2016	83,103,038	32,726,204	50,376,834	8,750,000	16,612,870	25,362,870	1.99
2017	86,970,065	37,735,743	49,234,322	10,090,000	15,988,725	26,078,725	1.89

1. Includes operating revenue plus interest income, net of interest capitalized.
2. Includes operating expenses less depreciation/amortization and payment in lieu of taxes (PILOT).

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Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance With *Government Auditing Standards*

The Honorable Members of the City Council
City of Norfolk, Virginia:

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the basic financial statements of the Water Utility Fund of the City of Norfolk, Virginia (the Fund), which comprise the statement of net position as of June 30, 2017, and the related statements of revenues, expenses, and changes in net position and cash flows for the year then ended, and the related notes to the basic financial statements, and have issued our report thereon dated December 15, 2017.

Internal Control Over Financial Reporting

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

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or 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 Fund's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Fund'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 Fund's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

KPMG LLP

Norfolk, Virginia
December 15, 2017

APPENDIX C

PROPOSED FORM OF OPINION OF BOND COUNSEL

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March 27, 2018

City Council of the
City of Norfolk, Virginia
Norfolk, Virginia

$26,700,000
City of Norfolk, Virginia,
Water Revenue Bonds,
Series 2018

Ladies and Gentlemen:

We have served as Bond Counsel in connection with the issuance and sale by the City of Norfolk, Virginia (the "City"), of its $26,700,000 Water Revenue Bonds, Series 2018 (the "2018 Bonds"), dated the date hereof. The City Council of the City authorized the issuance of the 2018 Bonds by Ordinance No. 47,117 enacted on January 23, 2018. The City issued the 2018 Bonds under the terms and conditions of a Master Indenture of Trust dated as of November 1, 1993, as previously supplemented and amended (the "Master Indenture"), between U.S. Bank National Association, as successor trustee (the "Trustee"), and the City, and as further supplemented by a Thirteenth Supplemental Indenture of Trust dated March 1, 2018 (the "Thirteenth Supplemental Indenture"), between the Trustee and the City. The Master Indenture and the Thirteenth Supplemental Indenture are referred to collectively as the "Indenture."

We refer you to the 2018 Bonds and the Indenture for a description of the purposes for which the 2018 Bonds are issued, their terms and the security for them.

In connection with this opinion, we have examined (i) the Constitution of Virginia (the "Constitution"), (ii) the applicable laws of (A) the Commonwealth of Virginia (the "Commonwealth"), including without limitation the Public Finance Act of 1991, Chapter 26, Title 15.2, Code of Virginia of 1950, as amended, and (B) the United States of America, including without limitation the Internal Revenue Code of 1986, as amended (the "Code"), and (iii) copies of proceedings and other documents relating to the issuance and sale of the 2018 Bonds by the City as we have deemed necessary to render this opinion.

As to questions of fact material to our opinion, we have relied upon and are assuming the accuracy of certifications and representations of the City, City officers, other public officials and certain other third parties contained in certificates and other documents delivered at closing, including without limitation, certifications as to the use of proceeds of the 2018 Bonds without undertaking to verify them by independent investigation. In addition, without undertaking to verify the same by independent investigation, we have relied on computations provided to us by PFM Financial Advisors, LLC, financial advisor to the City, the mathematical accuracy of which was verified by Robert Thomas CPA, LLC, relating to the yield on investments in the escrow fund established with a portion of the proceeds of the 2018 Bonds and the yield on the 2018 Bonds.

We have assumed that all signatures on documents, certificates, and instruments examined by us are genuine, all documents, certificates, and instruments submitted to us as originals are authentic, and all documents, certificates, and instruments submitted to us as copies conform to the originals. In addition, we have assumed that all documents, certificates, and instruments relating to this transaction have been duly authorized, executed, and delivered by all parties to them other than the City, and we have further assumed the due organization, existence, and powers of all parties other than the City.

Based on the foregoing, in our opinion, under current law:

1. The City has the requisite authority and power to enter into the Indenture to issue and sell the 2018 Bonds, and to apply the proceeds from the issuance and sale of the 2018 Bonds as set forth in the Thirteenth Supplemental Indenture. Neither the faith and credit of the Commonwealth nor the faith and credit of the City or any other political subdivision of the Commonwealth are pledged to the payment of the principal of or premium, if any, or interest on the 2018 Bonds.

2. The 2018 Bonds have been duly authorized, executed, and delivered in accordance with the Constitution and statutes of the Commonwealth and the Indenture and constitute legal, valid and binding limited obligations of the City, payable solely from the Net Revenues, as hereinafter defined, and other property pledged for such purpose under the Indenture for the security of the 2018 Bonds on a parity with the bonds currently outstanding under the Indenture (the "Outstanding Bonds"), any additional bonds to be issued in the future under the Indenture ("Additional Bonds") and any parity indebtedness incurred in the future under the Indenture ("Parity Indebtedness").

3. The Indenture has been duly authorized, executed, and delivered by the City, constitutes a legal, valid and binding obligation of the City, and is enforceable against the City in accordance with its terms. The Thirteenth Supplemental Indenture complies in all respects with the requirements of the Master Indenture.

4. The Master Indenture requires the City to fix, revise, and collect rates, fees, and other charges for the use of and for the services furnished by the City's water system so that the revenues, receipts and income derived therefrom after payment of the City's operating expenses (the "Net Revenues") will be at least sufficient to pay when due, among other things, the principal of and interest on the Outstanding Bonds and the 2018 Bonds.

5. Interest on the 2018 Bonds, including any accrued "original issue discount"

properly allocable to the owners of the 2018 Bonds, is (i) excludable from gross income for purposes of federal income taxation under Section 103 of the Code, (ii) not a specific item of tax preference for purposes of the federal alternative minimum income tax imposed on individuals and corporations (a "Specific Tax Preference Item"). However, for purposes of the alternative minimum tax imposed on corporations, as defined for federal income tax purposes under Section 56 of the Code, interest on the 2018 Bonds must be included in computing adjusted current earnings. The "original issue discount" on any 2018 Bond is the excess of its stated redemption price at maturity over the issue price of such maturity. We express no opinion regarding other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the 2018 Bonds.

In delivering this opinion, we are assuming continuing compliance with the Covenants, as hereinafter defined, by the City, so that interest on the 2018 Bonds will remain excludable from gross income for federal income tax purposes. The Code and the regulations promulgated thereunder contain a number of requirements that must be satisfied after the issuance of the 2018 Bonds in order for interest on the 2018 Bonds to be and remain excludable from gross income for purposes of federal income taxation and do not become a Specific Tax Preference Item. These requirements include, by way of example and not limitation, restrictions on the use, expenditure and investment of the proceeds of the 2018 Bonds and the use of the property financed or refinanced by the 2018 Bonds, limitations on the source of the payment of and the security for the 2018 Bonds, and the obligation to rebate certain excess earnings on the gross proceeds of the 2018 Bonds to the United States Treasury. The tax certificate and related documents for the 2018 Bonds (the "Tax Certificate") delivered at closing by the City contain covenants (the "Covenants") under which it has agreed to comply with such requirements. A failure to comply with the Covenants could cause interest on the 2018 Bonds to become includable in gross income for federal income tax purposes retroactive to their date of issue. In the event of noncompliance with the Covenants, the available enforcement remedies may be limited by applicable provisions of law and, therefore, may not be adequate to prevent interest on the 2018 Bonds from becoming includable in gross income for federal income tax purposes.

We have no responsibility to monitor compliance with the Covenants after the date of issue of the 2018 Bonds.

Certain requirements and procedures contained, incorporated or referred to in the Tax Certificate, including the Covenants, may be changed and certain actions may be taken or omitted under the circumstances and subject to the terms and conditions set forth in such document. We express no opinion concerning any effect on the excludability of interest on the 2018 Bonds from gross income for federal income tax purposes of any such subsequent change or action that may be made, taken or omitted upon the advice or approval of counsel other than this firm.

6. Interest on the 2018 Bonds is excludable from the gross income of the owners thereof for purposes of income taxation by the Commonwealth. We express no opinion regarding (i) other tax consequences arising with respect to the 2018 Bonds under the laws of the Commonwealth or (ii) any consequences arising with respect to the 2018 Bonds under the tax laws of any state or local jurisdiction other than the Commonwealth.

The obligations of the City under the 2018 Bonds and the Indenture are subject to the provisions of applicable bankruptcy, insolvency, reorganization, moratorium, and similar laws, now or hereafter in effect, relating to or affecting the enforcement of creditors' rights generally. Such obligations are also subject to usual equitable principles, which may limit the specific enforcement of certain remedies but which do not affect the validity of the obligations.

Additional Bonds may be issued and Parity Indebtedness incurred from time to time under the conditions, limitations, and restrictions set forth in the Indenture, and any such Additional Bonds or Parity Indebtedness will be secured equally and ratably as to the pledge of Net Revenues with the Outstanding Bonds and the 2018 Bonds, as provided in the Indenture.

Our services as Bond Counsel have been limited to rendering the foregoing opinion based on our review of such legal proceedings as we deem necessary to opine on the validity of the 2018 Bonds and the income tax status of the interest on them. We express no opinion as to the accuracy, completeness or sufficiency of any information that may have been relied upon by any owner of the 2018 Bonds in making a decision to purchase the 2018 Bonds. This opinion is given as of the date hereof, and we assume no obligation to revise or supplement this opinion to reflect any facts or circumstances that may hereafter come to our attention, or any changes in law that may hereafter occur.

Very truly yours,

APPENDIX D

CERTAIN INFORMATION CONCERNING THE CITY

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THE CITY OF NORFOLK

INTRODUCTION

The City of Norfolk was established as a town in 1682, as a borough in 1736 and incorporated as a city in 1845. The City lies at the mouth of the James and Elizabeth Rivers and the Chesapeake Bay, and is adjacent to the cities of Virginia Beach, Portsmouth and Chesapeake.

Table D-1
City of Norfolk, Virginia
Area of City

Year	Square Miles
1950	37.19
1960	61.85
1970	61.85
1980	65.75
1990	65.98
2018	65.98

CITY GOVERNMENT

Norfolk is an independent, full-service City with sole local government taxing power within its boundaries. It derives its governing authority from the City Charter, originally adopted by the General Assembly of Virginia (the "General Assembly") in 1918, which authorizes a council-manager form of government. The City Council exercises all of the governmental powers conferred upon the City. The City Council is comprised of eight members, a Mayor (elected at large) and seven members from the "ward system". Two members of the seven members are elected from superwards. The City Council elects a Vice Mayor from among its members. Among the City officials appointed by the City Council is the City Manager, the administrative head of the municipal government. The City Manager carries out its policies, directs business procedures and appoints, with the power to remove, the heads of departments and other employees of the City except those otherwise specifically covered by statutory provisions. The City Council also appoints certain boards, commissions and authorities of the City.

Certain Elected Officials

The City's current elected officials include:

Kenneth Cooper Alexander, Mayor

In May 2016, Mr. Alexander was elected Mayor of the City of Norfolk. He is the President of Metropolitan Funeral Service. As a Norfolk native, he began his public service career more than two decades ago. Mr. Alexander received a Bachelor's degree in Political Science from Old Dominion University, Norfolk, Virginia, and a Master's degree in Diplomacy from Norwich University, the oldest private military college in Northfield, Vermont. Mr. Alexander previously served in the Senate of Virginia, where he was a member of the Commerce and Labor, Finance, Transportation and Privileges and Election committees. Prior to his election to the Senate, Mr. Alexander represented the 89th District in the House of Delegates from 2002 until 2012, serving on the Commerce, Labor, Education, Privileges and Elections and Rules committees.

Dr. Theresa W. Whibley, Vice Mayor

Dr. Whibley, representing Ward 2, was first elected to City Council in July 2006. She is an obstetrician and gynecologist in private practice at Women Caring, PLC in Norfolk. Dr. Whibley is a graduate of Eastern Virginia Medical School, Jones Institute of Reproductive Endocrinology, Norfolk, Virginia, Old Dominion University, Norfolk, Virginia and the College of William and Mary, Williamsburg, Virginia. Dr. Whibley is active in many local professional organizations.

Mamie B. Johnson, Council Member

Mrs. Johnson, representing Ward 3, was elected to City Council in May 2014. Mrs. Johnson was employed with Norfolk Pubic Schools as a teacher for 14 years and an Instructional Specialist for six years. She is currently the Director of the Before and After School Program at Richard Bowling Elementary School and the Life Enrichment Center Urban Youth Summer Camp. She received a Bachelor's degree in Education from Norfolk State University, Norfolk, Virginia. She is active in many local professional and civic organizations, where she has held a number of leadership positions.

Andria P. McClellan, Council Member

Mrs. McClellan, representing Superward 6, was elected to City Council in May 2016. She received a Bachelor's degree from the University of Virginia, Charlottesville, Virginia, and graduated from the Wharton Management Program at the University of Pennsylvania. She is active in many local professional and civic organizations, and she presently serves on several boards, including WHRO, CIVIC Leadership Institute and the advisory board of OneVirginia2021.

Paul R. Riddick, Council Member

Mr. Riddick, representing Ward 4, was first elected to City Council in July 1992. He is the owner and operator of Riddick Funeral Service in Norfolk. He attended Norfolk State University, Norfolk, Virginia, and has an Associates in Art and Sciences degree in Funeral Service from John Tyler Community College, Chester, Virginia. Mr. Riddick is active in many local professional organizations.

Thomas R. Smigiel, Council Member

Mr. Smigiel, representing Ward 5, was first elected to City Council in May 2010. He received a Bachelor of Science degree in Education from Old Dominion University, Norfolk, Virginia, and a Master's degree in School Administration from Cambridge College, Chesapeake, Virginia. He is Principal at the Academy for Discovery at Lakewood in Norfolk. He is involved in many local professional and civic organizations, where he has held a number of leadership positions.

Martin A. Thomas, Jr., Council Member

Mr. Thomas, representing Ward 1, was first elected to City Council in August 2016. He received a Bachelor of Science degree in Public and Urban Affairs from Virginia Polytechnic Institute and State University, Blacksburg, Virginia and graduated from the University of Richmond School of Law (T.C. Williams School of Law), Richmond, Virginia. He is currently a partner at the Decker Law Firm in downtown Norfolk where he has litigated personal injury cases since 2006. He served on the Norfolk Planning Commission from April 2011 until his election to City Council and on the Norfolk Architectural Review Board from April 2014 until his election to City Council. He is involved in many local professional and civic organizations, where he has held a number of leadership positions.

Angelia M. Williams Graves, Council Member

Mrs. Williams Graves, representing Superward 7, was first elected to City Council in November 2010. She holds a current real estate license and is a realtor with Rose & Womble Realty Company. Mrs. Williams Graves received an Associate of Science degree in Business Administration from Tidewater Community College in 2004. She graduated from the University of Virginia's Sorensen Institute for Political Leadership in 2005 and from the Alpha School of Real Estate in 2008. She received a Bachelor's degree in Marketing from Old Dominion University, Norfolk, Virginia. She is involved in many local professional and civic organizations, where she has held a number of leadership positions.

Certain Appointed Officials

Douglas L. Smith, City Manager

Douglas L. Smith assumed his position as City Manager in June 2017, after having served as the Interim City Manager since December 2016. He serves at the pleasure of the City Council and is responsible for the day-to-day management and oversight of the City. Prior to his appointment as Interim City Manager, Mr. Smith was President of The Doug Smith Group where he was an economic development consultant focused on transformational public private partnerships and regional innovation services. Mr. Smith also previously served as Deputy City Manager in Virginia Beach and Portsmouth. Mr. Smith also served as Portsmouth's Chief Plans and Policy Officer and Economic Development Director. Mr. Smith previously served on Portsmouth's City Council as well and was Portsmouth's representative to the Hampton Roads Transportation Planning Organization and the Hampton Roads Planning District. He earned a Bachelor of Art in History from the University of Virginia, Charlottesville, Virginia.

Christine Garczynski, Director of Finance

Christine Garczynski assumed her position as Director of Finance in January 2016. At the direction of the City Manager, she is responsible for the comprehensive oversight of financial operations for the City. In addition, she is responsible for the administration of the financial affairs of the City which includes financial accounting and reporting; accounts payable; accounts receivable; payroll; cash management; risk management; debt management; purchasing; fiscal systems and the Norfolk Employees' Retirement System. Ms. Garczynski has worked for the City since 1992. She previously served as Acting Director of Finance from June 2015 to January 2016, and prior to her appointment as Acting Director of Finance, her most recent position was Debt Manager responsible for successfully coordinating and administering the City's debt obligations and the day-to-day management of the City's cash and investment portfolio. Ms. Garczynski earned a Bachelor of Science in Business Administration from Longwood University, Farmville, Virginia.

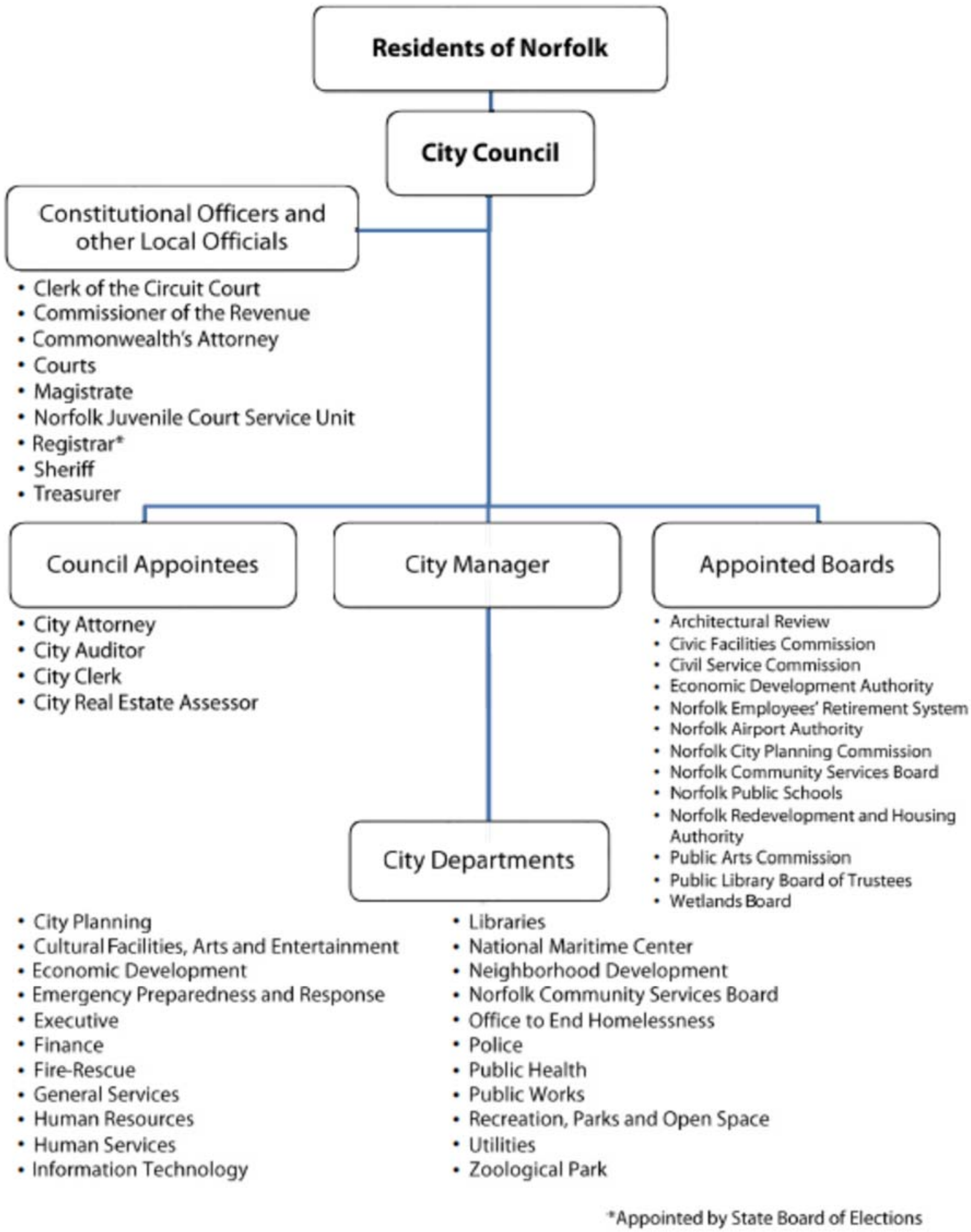
Bernard A. Pishko, City Attorney

Bernard A. Pishko was first appointed by City Council as City Attorney in November 1997. He previously served as Deputy City Attorney from 1989 to 1997 and as an Assistant City Attorney from 1984 to 1989. He has practiced law since 1982. The City Attorney is also general counsel for the Norfolk School Board, Norfolk Recreational Facilities Authority, Norfolk Community Services Board, Hospital Authority of Norfolk, Norfolk Municipal Employees' Retirement System, Norfolk Electoral Board, Civil Service Commission and The Chrysler Museum of Art. Mr. Pishko is a member of many professional associations and community organizations. He received his undergraduate degree from Brown University, Providence, Rhode Island, a Master's degree in Business Administration from the College of William and Mary, Williamsburg, Virginia, and a law degree from the Marshall-Wythe School of Law, Williamsburg, Virginia.

Governmental Services and Facilities

In Virginia, cities and counties are not overlapping units of government. Each city or county is a distinct political entity providing services for the population within its respective jurisdiction. The City provides a comprehensive range of public services characteristic of its form of government under Virginia law. These services are designed to provide an environment within which the educational, physical, social and cultural needs of its citizens are met. These general governmental services include police protection, fire and paramedical services, public health and social services, planning and zoning management, code enforcement, storm water management, street maintenance, traffic control, parks and cemeteries operation and maintenance, recreation and library services, economic development, solid waste disposal and general administrative services. In addition, water and wastewater utilities and parking facilities services are provided under an enterprise fund concept with user-charges set by City Council.

City Organization



OTHER GOVERNMENTAL ENTITIES

School Board of the City of Norfolk

Norfolk Public Schools held elections for two of the seven seats on its School Board on May 3, 2016, with the remaining five seats up for election in November 2018. In November 2014, voters elected to have School Board members elected and replace the City Council-appointed seven-member School Board. In January 2015, City Council approved that the School Board members would be elected based on the same ward system used to elect City Council members. The School Board is a corporate body and in its corporate capacity is vested with all of the duties, obligations and responsibilities imposed upon school boards by law. The City Council is required to appropriate annually to the School Board the amount needed for the support of the public schools in maintaining educational programs which meet the standards of quality prescribed by law. Categorical aid from the Commonwealth and the federal government designated for educational purposes is included in the City's General Fund budgetary revenue. This categorical aid, plus moneys derived from local sources, provides the funds for the major share of the School Board's operations. On an ongoing basis, the City also issues debt to finance needed capital projects of the school system.

The School Board presently operates 33 elementary schools, eight middle schools, five high schools and several auxiliary schools, including alternative, magnet and specialty programs. For the Fiscal Year 2017 the School Board's expenditures for education totaled $375,733,368.

Norfolk Airport Authority

The Norfolk Airport Authority, a political subdivision of the Commonwealth, was created to operate an airport and to promote industrial growth and consists of both an Airport Fund and an Investment Fund. The Airport Fund was established by the Authority to account for the operations of the Norfolk International Airport. Revenue generated by airport operations is used to meet all operating expenses and to provide for payment of all principal and interest on debt of the Authority related to the airport. The Investment Fund was established by the Authority to provide for certain airport capital improvements.

The Authority finances individual capital projects by issuing bonds or obtaining loans and intergovernmental grants in its own name and concurrently entering into leases which provide for payment of all principal and interest on the related obligations as they become due. Revenue includes rental income on non-airport property owned by the Authority and interest on investments.

The Authority's Commissioners are appointed by City Council, but the Commission designates its own management and has oversight responsibility for its own financial matters. The City does not provide funds for the operations of the Authority, and pursuant to Section 144(q) of the City Charter, the Authority is required to submit its annual budget to the City Council for the purposes of information only. The City has the option to reacquire, without consideration, title to all property and equipment after payment by the Authority of all obligations relating to the improvements at the airport.

Hampton Roads Regional Jail Authority

The Hampton Roads Regional Jail Authority ("HRRJA") is a regional organization which includes the cities of Chesapeake, Hampton, Newport News, Norfolk and Portsmouth, created for the purpose of providing, operating and maintaining a regional jail facility for the correctional overflow from each community. HRRJA is a primary government, with no component units, that is a body politic and corporate created pursuant to Article 3.1, Chapter 3, Title 53.1 of the Virginia Code, as amended, and is governed by a 15-member Board of Directors, consisting of three representatives appointed by each of the member cities. The budgeting and financing of HRRJA are subject to the approval of the Board of Directors, with each individual having a single vote. HRRJA is responsible for its own financial matters, maintains its own books of account and is audited annually by independent accountants that it engages.

The regional jail facility (the "Jail"), which opened in April 1998, consists of approximately 385,518 square feet of building area, including three housing building units, a support building and a central plant. The Jail holds 1,090 inmates, 250 of which are designated to the City. The City is responsible for a maximum of 22.22% of the total operating cost less the revenue derived from the Virginia Compensation Board and the per diem reimbursement from the Commonwealth for the housing of state inmates.

The Southeastern Public Service Authority of Virginia

The Southeastern Public Service Authority ("SPSA") is a joint venture of the cities of Chesapeake, Franklin, Norfolk, Portsmouth, Suffolk and Virginia Beach and the counties of Isle of Wight and Southampton, created for the purpose of providing, operating and maintaining a regional system for the collection, transfer, processing and disposal of solid waste refuse.

SPSA is a primary government, with no component units, that is a public body politic and corporate created pursuant to the Virginia Water and Sewer Authorities Act, and is governed by a Board of Directors consisting of representatives appointed by each of the member cities and counties and by the Governor. Budgeting and financing of SPSA is subject to the approval of the Board of Directors, with each individual having a single vote. SPSA is responsible for its own financial matters, maintains its own books of account and is audited annually by independent accountants that it engages.

The regional system includes solid waste transfer stations in each of the member jurisdictions, a landfill, rolling stock and ancillary facilities.

Hampton Roads Planning District Commission

Hampton Roads Planning District Commission ("HRPDC"), a regional planning agency authorized by the Virginia Area Development Act of 1968, was created by the merger of the Southeastern Virginia Planning District Commission and the Peninsula Planning District Commission on July 1, 1990. HRPDC performs various planning services for the cities of Chesapeake, Franklin, Hampton, Newport News, Norfolk, Portsmouth, Poquoson, Suffolk, Williamsburg and Virginia Beach, and the counties of Gloucester, Isle of Wight, James City, Southampton and York. Revenue of HRPDC is received primarily from member contributions and various state and federal grant programs. The participating governments do not have an equity interest in HRPDC, and accordingly, no equity interest has been reflected in the City's financial statements. Complete financial statements of HRPDC can be obtained from HRPDC.

Transportation District Commission of Hampton Roads

The Transportation District Commission of Hampton Roads, known as Hampton Roads Transit ("HRT"), a political subdivision of the Commonwealth, was formed on May 9, 1973, as a joint exercise of governmental power in accordance with provisions of Virginia law.

HRT was created on October 1, 1999, with the consolidation of the Tidewater Regional Transit and Peninsula Transportation District Commission. It is believed to be the first voluntary merger of public transit agencies in the nation. HRT provides public transportation facilities and services within cities of Norfolk, Chesapeake, Hampton, Newport News, Portsmouth and Virginia Beach.

Oversight responsibility is exercised by all of the participating localities through their designated representatives. Responsibility for the day-to-day operations of HRT rests with professional management. HRT constructed and operates the City's light rail system.

The participating governments do not have an equity interest in HRT, and accordingly, no equity interest has been reflected in the City's financial statements. Complete financial statements of HRT can be obtained from HRT.

Hampton Roads Transportation Accountability Commission

The Hampton Roads Transportation Accountability Commission ("HRTAC") was created effective July 1, 2014, as a political subdivision of the Commonwealth in accordance with the provisions of Chapter 26, Title 33.2 of the Virginia Code (the "HRTAC Act"). HRTAC's purposes include assessment and prioritization of regional highway, bridge and tunnel projects to be funded with, among other potential sources of funds, the Hampton Roads Transportation Fund ("HRTF"). HRTF is a fund generated by the assessment and collection of sales and use tax and a wholesale fuel tax in the Hampton Roads region by the Commonwealth. HRTAC is comprised of 23 members, which include locally elected officials and ex-officio members from several state agencies. The Mayor of the City, as the City's chief elected officer, is a member of HRTAC. HRTAC is expected to consider multiple transportation projects for funding, and eventually, to issue bonds to finance the costs of such transportation projects. Repayment of any bonds issued by HRTAC will be made from sources described in the HRTAC Act, including, without limitation, the HRTF. Bonds of HRTAC will not be obligations of any jurisdiction in the Hampton Roads region, including the City.

Hospital Authority of Norfolk

The Hospital Authority of Norfolk (the "HAN"), which has a nine-member Board of Commissioners appointed by City Council, is a tax-exempt, not-for-profit political subdivision of the Commonwealth. The HAN operates Lake Taylor Hospital as a long-term care facility licensed by the Virginia State Health Department to provide a continuum of patient care ranging from sub-acute hospital services to skilled nursing care.

Norfolk Redevelopment and Housing Authority

The Norfolk Redevelopment and Housing Authority ("NRHA"), a political subdivision of the Commonwealth, was created by the City on July 30, 1940, under the provisions of the U.S. Housing Act of 1937. The NRHA provides subsidized public housing and administers redevelopment and conservation efforts within the City in accordance with state and federal legislation. The seven members of the Board of Commissioners are appointed by City Council. The NRHA conducts such activities as community development and urban reinvestment, on behalf of the City. The NRHA is also empowered by the Commonwealth to authorize and issue revenue bonds for its corporate purposes. The NRHA develops its operating budget without approval from the City Council and executes contracts on its own behalf. The City does not exercise a significant degree of oversight responsibility for the NRHA, as it is responsible for designating its own management, developing its own operating budget and executing major contracts on its own behalf. The NRHA is responsible for its own financial matters as it maintains its own books of account, is audited annually by independent accountants it engages, and has authority over earnings, deficits and moneys other than City contract funds. The City contracts with NRHA to complete specific projects, generally capital improvement projects.

The Economic Development Authority of the City of Norfolk

The EDA, a political subdivision of the Commonwealth, was created by ordinance of the City of Norfolk in 1972, pursuant to the provisions of the Industrial Development and Revenue Bond Act. The EDA is authorized to acquire, own, lease and dispose of properties to the end that such activities may promote industry and develop trade by inducing manufacturing, industrial and commercial enterprises to locate or remain in the City and further the use of the Commonwealth's agricultural and natural resources. The EDA is empowered by the Commonwealth to authorize and issue industrial development bonds. The EDA acts as an intermediary between financial institutions and borrowers; it has no responsibility for borrowers' debt. Although Commissioners are appointed by City Council, the EDA designates its own management, maintains its own books of account and receives revenue from administrative fees charged to borrowers.

The Slover Library Foundation

The Slover Library Foundation (the "Library Foundation"), a not-for-profit organization, was formed on October 31, 2008, to participate in the funding of a new central library for the City. The new central library that opened in January 2015 is named the Slover Library. Two historic downtown structures, the Seaboard Building and the Selden Arcade, were joined by an architecturally significant structure to create the new technologically advanced library. Funding provided by the Library Foundation was used for construction costs and the purchase and maintenance of technology used in the library. The Library Foundation designates its own management, maintains its own books of account, engages its own independent accountant and receives its revenue from third parties.

Norfolk Botanical Garden

Norfolk Botanical Garden is a non-profit museum for plants and is managed by the Norfolk Botanical Garden Society (the "Society"), a 501(c)(3) non-profit organization supported by donations, membership dues, admissions and program fees. Norfolk Botanical Garden is a Virginia Historic Landmark and is listed on the National Register of Historic Places. The City, which owns the botanical gardens, has an agreement with the Society to operate the botanical garden. This agreement expires on June 30, 2022. The Society receives annual funding from the City for improvements and operating costs.

The Chrysler Museum, Inc.

The Chrysler Museum, Inc. (the "Museum"), a Virginia non-stock, not-for-profit organization, was formed on January 1, 1980, by incorporating the Chrysler Museum in Norfolk. The main purpose of the Museum is the advancement, encouragement and promotion of the study and appreciation of art. The Museum designates its own management, which is self-sustaining, maintains its own books of account, engages its own independent accountant and receives its revenue from facility rental fees, patron membership, planned giving and from other independent grants.

ECONOMIC AND DEMOGRAPHIC FACTORS

Population

As reflected in Table D-2 and D-3 below, from 2008 to 2017 the City's population grew approximately 1.35%. The City is the second most populous city in Virginia, as shown in Table D-3.

Table D-2
Population Trend Comparisons
2008 – 2017

Calendar Year	Norfolk (1)	Hampton Roads MSA (1) (2)	Virginia (3)	U.S. (3)
2008	242,983	1,631,967	7,833,496	304,093,966
2009	243,957	1,636,770	7,925,937	306,771,529
2010	242,803	1,641,078	8,001,024	308,745,538
2011	243,985	1,654,311	8,105,850	311,644,280
2012	245,803	1,672,401	8,186,628	313,993,272
2013	246,392	1,682,842	8,260,405	316,234,505
2014	246,394	1,690,090	8,326,289	318,622,526
2015	247,189	1,700,609	8,382,993	321,039,839
2016	247,087	1,727,366	8,411,808	322,405,935
2017	246,256	1,729,326	8,470,020	325,719,718

Sources: U.S. Census Bureau and the Weldon Cooper Center for Public Service.
Notes: (1) Norfolk and Hampton Roads MSA population estimates are from the Weldon Cooper Center for Public Service, except for the 2010 population estimates, which are from the U.S. Census Bureau.
(2) The Hampton Roads MSA is the Virginia portion only.
(3) U.S. and Virginia population estimates are from the U.S. Census Bureau.

Table D-3
Five Most Populous Cities in Virginia

City	2010 Census Population	2017 Population Estimate
Virginia Beach	437,994	454,448
Norfolk	242,803	246,256
Chesapeake	222,209	242,655
Richmond	204,219	222,853
Newport News	180,719	182,155

Sources: U.S. Census Bureau and the Weldon Cooper Center.

Table D-4 provides an annual comparison of per capita personal income since 2007.

Table D-4
City of Norfolk, Virginia
Per Capita Personal Income Comparisons
2007 – 2016

Calendar Year	City	Hampton Roads MSA	Virginia	U.S.
2007	$35,940	$39,277	$44,422	$39,776
2008	36,040	40,597	45,618	41,052
2009	34,237	40,345	44,458	39,366
2010	34,501	41,032	45,412	40,274
2011	35,342	42,830	47,689	42,459
2012	36,308	44,134	49,320	44,247
2013	36,066	44,097	48,956	44,425
2014	37,052	45,276	50,345	46,392
2015	38,676	46,400	52,052	48,112
2016	38,484	47,019	52,957	49,246

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Information System. 2016 is the most recent year for which data is available.

The age distribution of the City's population is presented in Table D-5.

Table D-5
City of Norfolk, Virginia
City Population Distribution by Age
1960 – 2010

Year	Population	Under 20	20-64	65 or Older
1960	305,872	39.8%	54.5%	5.7%
1970	307,951	35.4	57.8	6.8
1980	266,979	30.7	60.1	9.2
1990	261,250	28.1	61.4	10.5
2000	234,403	27.3	61.5	11.2
2010	242,803	25.3	65.3	9.4

Source: U.S. Census Bureau.

Housing and Construction Availability

The City saw total home sales fall by approximately 7.3% during calendar year 2017, as compared to calendar year 2016. Total sales for calendar year 2017 were 3,075, as compared to 2,867 for calendar year 2016. The average price of homes sold in calendar year 2016 increased by approximately 2.8%, from $211,028 to $216,916, when compared to the average home price in calendar year 2016.

Table D-6 provides an annual breakdown of residential building permits over the past ten Fiscal Years.

Table D-6
City of Norfolk, Virginia
Residential Construction
Fiscal Years 2008 – 2017

Fiscal Year	Building Permits	Number of Units	Value (in thousands)
2008	277	815	$101,212
2009	209	535	35,878
2010	191	621	58,729
2011	221	479	37,298
2012	268	371	39,360
2013	384	822	63,728
2014	432	1,393	93,072
2015	399	729	59,018
2016	383	831	68,693
2017	519	1,332	122,267

Source: Permit Tracking System, Department of Planning, City of Norfolk, Virginia.

Table D-7 presents annual nonresidential construction permits, which includes commercial buildings, public buildings, schools, public utility buildings and miscellaneous structures, over the past ten Fiscal Years.

Table D-7
City of Norfolk, Virginia
Nonresidential Construction
Fiscal Years 2008 – 2017

Fiscal Year	Building Permits	Value (in thousands)
2008	35	$102,714
2009	38	138,131
2010	35	104,922
2011	27	40,073
2012	26	116,401
2013	28	105,635
2014	33	37,575
2015	36	233,824
2016	20	91,171
2017	34	90,716

Source: Permit Tracking System, Department of Planning, City of Norfolk, Virginia.

Employment

Businesses in the City provide residents with employment opportunities in a variety of industries of which services, government and trade are the most significant.

The unemployment rate for the City is illustrated in Table D-8.

Table D-8
City of Norfolk, Virginia
Unemployment Rates
2009 – 2018

Calendar Year	Norfolk	Hampton Roads MSA	Virginia	U.S.
2009	8.5%	6.9%	6.7%	9.3%
2010	8.8	7.6	7.1	9.6
2011	8.3	7.3	6.6	8.9
2012	7.6	6.8	6.0	8.1
2013	6.9	6.2	5.7	7.4
2014	6.4	5.7	5.2	6.2
2015	5.6	4.9	4.4	5.3
2016	5.4	4.6	4.0	4.9
2017	4.3	3.9	3.4	3.9
2018(1)	4.4	4.0	3.7	4.1

Source: U.S. Bureau of Labor Statistics.
Note: (1) Figures as of January 2018.

Table D-9
City of Norfolk, Virginia
Civilian Employment and Average Weekly Gross Wages
3rd Quarter, 2017

	Number of Establishments	Number of Employees	Average Weekly Wage	Percentage of Employment
Education and Health Services	933	37,230	$928	29.4%
Trade, Transportation & Utilities	1,192	24,632	935	19.5
Professional & Business Services	1,041	20,844	1,248	16.5
Public Administration	67	4,375	1,539	3.5
Leisure and Hospitality	652	13,701	402	10.8
Financial Activities	544	7,726	1,144	6.1
Manufacturing	147	6,093	1,042	4.8
Construction	367	4,564	988	3.6
Other Services	795	4,572	585	3.6
Information	78	2,822	1,159	2.2
Total	5,800	141,049	$990	100.0%

Sources: U.S. Bureau of Labor Statistics. Virginia Employment Commission, Quarterly Census of Employment & Wages Program. Totals include non-disclosable data.

Economic Development

Economic development initiatives are focused on the attraction, expansion and retention of businesses, neighborhood and community revitalization and commercial corridor development. Some of the City-led initiatives to stimulate commercial revitalization include: Tax Abatement for Property Rehabilitation, State Enterprise Zone, Historically Underutilized Business Zones, Pedestrian Commercial Overlay Zones, Tax and Grant Benefits, public infrastructures and amenities. A new Technology Zone was created in 2016. In the past 18 months, the City has seen economic development from existing and new business, as well as new retail development and redevelopment of existing infrastructure, including over $40 million in business expansion and retention and the creation of approximately 400 jobs for existing companies; over $50 million in investment from new business and the creation of approximately 300 jobs; over $41 million in new retail investment and the creation of approximately 570 retail jobs; and over $300 million in reinvestment and redevelopment projects.

Resilience Strategy

Norfolk is one of a number of localities in the United States vulnerable to flooding from sea level rise and storm-surge. In October 2017, the U.S. Army Corps of Engineers released a draft feasibility report addressing coastal storm risk management for Norfolk. The draft report will be reviewed and refined and is subject to public comment. The Corps is expected to make a final report to Congress in 2019. The draft feasibility report recommends infrastructure upgrades, which the report indicates will take many years to implement. The draft feasibility report indicates that these upgrades are estimated to cost up to $1.6 billion. The draft feasibility report does not (and the final report is not expected to) identify a dedicated funding source for any of the recommended upgrades, other than to provide a suggested share of the costs to be paid by the federal government (subject to future appropriation by the federal government). There can be no assurance that funding for any of the recommended upgrades will be made available. Additionally, the draft feasibility report does not provide a timeframe over which the projects would need to be implemented or funded.

Norfolk has taken a proactive approach to addressing the impact of sea level rise with a resilience strategy described below, which embraces the City's relationship with its adjacent bay, rivers, streams, ponds and marshes.

In 2015, Norfolk adopted a comprehensive resilience strategy to address the challenges facing the City. This strategy is driven by three goals: (1) design the coastal community of the future, (2) create economic opportunity by advancing efforts to grow existing and new industry sectors and (3) advance initiatives to connect communities, deconcentrate poverty and strengthen neighborhoods.

Norfolk is undertaking many initiatives to address its resilience goals, including the following:

(1) Partnering with the U.S. Navy and the City of Virginia Beach on a Joint Use Land Study to mitigate the impacts of sea level rise on Navy operations: the study is expected to be completed in August of 2018.

(2) Encouraging or requiring resiliency as part of development activities: the City is updating its zoning code and includes resilient development activities as part of its comprehensive long-term plan (Norfolk 2030). These efforts go far beyond the FEMA floodplain requirements and include provisions that target Norfolk's unique situation and circumstances.

(3) Seeking grants and other outside funding to help defray the cost of resiliency projects: in 2016, Norfolk and several partners in the Commonwealth received a $120.5 million grant from the U.S. Department of Housing and Urban Development's National Disaster Resilience Competition. Grant funds will be used to address coastal resilience in the City's Ohio Creek watershed area.

(4) Partnering with other localities and organizations to promote resiliency: Norfolk has been designated as one of The 100 Resilient Cities (100RC) network, a program pioneered by the Rockefeller Foundation.

(5) Including resiliency projects routinely in the City's Capital Improvement Plan: in the City's Fiscal Year 2018-2022 Capital Plan, the City is investing $7.6 million annually in Storm Water System upgrades, street elevations and shoreline protection through the self-supporting Storm Water Fund that will directly or indirectly improve the City's resiliency.

Downtown Development

Downtown offers a mix of cultural attractions and entertainment for its citizens and tourists. The average vacancy rate for Downtown Class A office space as of January 2018 is approximately 6.7%, as shown in Table D-10.

Table D-10
City of Norfolk, Virginia
Downtown Norfolk Vacancy
January 2018

Class A	Rentable SF	Vacant SF	Percent Vacant
150 West Main Street	225,498	24,299	10.8%
Crown Center	58,674	0	0.0
Bank of America Tower	405,539	0	0.0
Main Street Tower	201,307	53,691	26.7
Norfolk Southern Tower	293,035	0	0.0
Wells Fargo Center	299,887	31,666	10.6
World Trade Center	367,000	35,720	9.7
Two Commercial	288,662	0	0.0
Total	2,139,602	184,791	6.7%

Source: CoStar, January 2018.

Renovation of Two Commercial Place is completed, converting from Class B to Class A and adding 286,000 additional occupied square foot. Bank presence in Downtown includes Bank of America, BB&T, Monarch, Old Point National, PNC, SunTrust, TowneBank and Wells Fargo. Bank of Hampton Roads, Southern Bank and several credit unions are also located Downtown.

The first phase of the new $126 million Consolidated Courts Complex opened in January 2015 near City Hall and adjacent to the Civic Plaza light rail station. Phase two of the complex was completed in the spring of 2018 and houses the General District Court, Circuit Court, the Juvenile and Domestic Relations Court and the law library.

Residential Development

Neighborhood revitalization is one of the City's core initiatives and part of the economic development plan. By increasing the diversity of housing opportunities, the City expects to increase the diversity of its citizenry and expand the tax base. The City's goal for neighborhood and commercial development is to provide an environment that increases private sector investment, retail sales generation and corresponding municipal revenue generation, create a framework for targeted and coordinated public and private investment and build upon and coordinate with other ongoing community development initiatives.

Residential investment continues to grow throughout the City, particularly in Downtown. Several new projects are currently under construction Downtown. These include 450 Boush (a mixed-use project with 150 units and 10,000 square feet of retail), the second phase of Rockefeller Apartments, a new building that will include 40 apartments, and the conversion of the former Bank of America into 300-unit luxury apartments called the Icon at CityWalk. Two other conversion projects are underway on Granby Street: The Savoy with 36 new units and 151 Granby, with 8 new units. Downtown projects completed within the past few years include the Metro on Granby, the Wainwright Downtown (126 units), The James (79 units), The Seaboard (135 units), The Law Building (135 units), and the Virginia Building (32 units and two retail spaces). St. Paul's Apartments, with 120 new units, will be the first residential project in the St. Paul's area. Together, approximately 1,500 new apartments have been or are going to be added to Downtown since 2010, bringing the estimated Downtown population to well over 6,000 residents. Other new residential developments includes Atlas Flats in the Midtown area and Front Street Apartments in the Fort Norfolk area, Banks at Berkley (50 units) and Claremont Apartments (156 apartments and 25 single-family homes) in Berkley/Campostella, the Element at Ghent (164 units), Fort Tar Lofts (13 units), The Promenade Pointe (187 units), The Pointe at Pickett Farm (300 units), 1500 Monticello (a mixed-use project with 207 units and 10,131 square feet of retail space) and The Watermark (372 units). Another major project in the Fort Norfolk area is the River Tower at Harbor's Edge, an expansion of Harbor's Edge, a full-service, premier Life Plan Retirement Community on the Elizabeth River. When completed in 2020, the 27-story River Tower will add 138 luxury residences and more than 95,000 square foot of common space.

The seven-mile stretch of beaches on the Chesapeake Bay known as Ocean View experienced redevelopment over the past decade. The East Beach section of Ocean View has 700 housing units with prices ranging from $350,000 to over $1.5 million, with an average home sales price of $733,507. A portion of the homes are currently occupied with the remainder of the properties planned for development. Lot sales total approximately $47 million representing nearly $230 million in home values and approximately $2.6 million in annual real estate taxes to the City. East Beach Phase 7, the final phase of East Beach consists of 38,000 square feet of retail and commercial space, as well as a mixture of 80 townhomes, single family homes, cottages and carriage houses. Also along the Chesapeake Bay, Pinewell Station, with 145 apartments, is being planned for the former Ramada Hotel site and Captain's Landing, with 38 townhouses, and Villa Marina Apartments, with 111 apartments, are in the planning stage.

Commercial Development

Simon Property Group Inc. has opened the first phase of Simon Premium Outlet Park. This represents an investment of approximately $75 million to build an outlet center on an existing City-owned golf course. The redevelopment plan calls for the City to retain approximately 65 acres for green space and walking trails around the lake creating new public open space. Phase I of the Simon Premium Outlet Park includes approximately 85 stores, 332,000 square feet of leasable space and is anticipated to generate an estimated $2.5 million in tax revenue.

Adjacent to the Simon Norfolk Premium Outlets will be a 331,000 square foot IKEA. Construction began in 2017, with a planned opening in spring 2019. IKEA is anticipated to bring more than $2.5 million in direct tax revenue.

With a capital investment of $32.5 million ADP, a comprehensive Human Capital Management solutions provider, moved to Downtown at the Atlantic at City Walk. The Atlantic features high ceilings, advanced fiber optics and connectivity. ADP is Downtown's largest employer with approximately 2,100 new jobs and an immediate impact of $1 million in tax revenue.

Movement Mortgage, one of the fastest-growing mortgage banks in the country, has relocated its largest operations center to the adaptive re-use of the former J.C. Penney department store at Military Circle Mall owned by the Norfolk EDA, known as 824 Military. Movement Mortgage transferred 550 jobs to Norfolk, with the planned addition of 200 more jobs to support its rapid national growth. The relocation of Movement Mortgage is anticipated to bring approximately $230,000 in new direct annual tax revenue. Optima Health is also occupying space at 824 Military, and added 200 new jobs.

Arts and Culture

Norfolk offers a mix of cultural attractions and entertainment for its citizens and tourists. Norfolk's entertainment and theatre venues include the Attucks Theatre, the Harrison Opera House, Chrysler Museum, and the "Theater District" which includes Chrysler Hall, Jeanne and George Roper Theater, Wells Theatre and the NorVa.

The NEON, or New Energy Of Norfolk, District is home to a new wave of passion and creativity in Downtown. Long-time cultural institutions like the Chrysler Museum of Art and Harrison Opera House anchor the District while new art venues like Glass Wheel Studio and Work|Release provide artists a place to make, create and show. Since the birth of the NEON District, the City's Public Art Commission has seen new murals and sculpture projects multiply that enhance the street environment and bring life to the NEON District.

Other recent investments to the City's cultural attractions include the Virginia Arts Festival headquarters, a home for the Hurrah Players, and the Perry Glass Studio of the Chrysler Museum of Art Glass Art Studio. The Virginia Arts Festival headquarters, which is located across the street from Chrysler Hall, houses year-round education outreach activities, a rehearsal and intimate performance space, as well as the Festival's administrative offices. Adjacent to the Virginia Arts Festival headquarters is the new home of the Hurrah Players, which features a 100-seat theater and two rehearsal halls. The Perry Glass Studio Chrysler Museum Glass Studio supports artists working in a variety of glassmaking processes, including blown glass, casting, fusing, flame working and cold working. Located adjacent to the museum, the Glass Studio is the only one of its kind in the Mid-Atlantic region, and complements the museum's extensive glass collection.

The 80,000 square foot Peter G. Decker, Jr. Half Moone Center is located in the harbor between Town Point Park and Nauticus/Battleship Wisconsin. The Peter G. Decker, Jr. Half Moone Center continues to serve as a multi-purpose facility for the City offering five distinct event spaces that can accommodate from 50 to 1,500 guests.

Transportation Initiatives

The City's light rail system, the Tide, began operation in August 2011. The Tide runs from the Eastern Virginia Medical School complex near Fort Norfolk to the Newtown Road/Virginia Beach city line. Amtrak passenger rail line service connecting Norfolk to Washington, D.C. via Petersburg and Richmond began operation in December 2012. From the 3,500 square foot train station located at Harbor Park, the intercity passenger rail serves a multi-modal center, which includes a light rail station. The facility will link intercity passenger rail to the light rail and regional bus systems, ferry service, cruise ship facilities and provide direct interstate access.

Construction of the Downtown Tunnel/Midtown Tunnel/MLK Extension project was completed a year ahead of schedule in June 2017. This $2.1 billion project was designed to create new connections between Norfolk and the City of Portsmouth and to improve the existing connections.

In 2013, construction began on the I-564 intermodal connector project. This $176 million project is expected to alleviate congestion and improve transportation flow on City and naval station streets, when completed. Completion of the I-564 intermodal connector project is expected in fall 2018. This project is funded by the Commonwealth. The Virginia Port Authority is creating a new intermodal gate complex at Norfolk International Terminals ("NIT"). This project is expected to cost approximately $29 million and connect with the I-564 intermodal connector project with the goals of easing commuting around NIT, reducing truck traffic on local roads and increasing cargo velocity and efficiency at NIT.

In order to provide additional state funds to road construction and maintenance, effective July 1, 2013, the Commonwealth commenced collecting an increased sales and use tax and new state and regional taxes on gasoline, motor vehicle sales and other specific taxes, which includes the collection of sales and use taxes from remote sellers (i.e., retailers that, other than their sales to residents, do not have a physical presence in the Commonwealth). Under existing federal law, the Commonwealth does not have the authority to collect state and local retail sales and use tax from remote sellers, but if federal law changes, then the taxes on remote sellers will be collected. In addition, purchasers in the Hampton Roads region, which includes the City, will pay increased sales and use taxes and other specific regional taxes on transactions that take place in Hampton Roads jurisdictions. Receipts from such additional taxes must be used to pay for transportation projects within the region. Such projects will be prioritized and selected by HRTAC, which will allocate such tax revenues for regional transportation projects. There can be no assurance that these new state and regional taxes will not be changed, but such taxes are expected to generate approximately $880 million per year for transportation funding across the Commonwealth, with the Hampton Roads regional taxes expected to generate approximately $200 million per year for major projects in the Hampton Roads region. The City is not directly responsible for related projects or liable for any debt obligations for HRTAC.

Announced in 2017, was the $3.3 billion expansion of the I-64 Hampton Roads Bridge Tunnel that will include funding from the Hampton Roads Transportation Fund, and likely to include state funding and federal funding. The project is expected to enhance existing connections between Norfolk and the peninsula, and will reduce congestion. Construction is expected to begin in 2019, with an estimated completion in 2024.

Norfolk Airport

Norfolk International Airport ("NIA") is one of the most powerful economic generators in the Hampton Roads region. Currently, NIA is served by Allegiant Air, American, Delta, Southwest and United and their regional partners. Offering over 150 arrivals and departures daily to major cities throughout the U.S., NIA presently ranks in the top 15% of commercial service airport in the United States and is estimated to serve over 3.2 million passengers in 2017.

NIA generates nearly 1,700 jobs and over $135 million in direct economic impacts annually. More than 775,000 annual visitors use NIA and other facilities in the region and contribute more than $550 million in estimated indirect economic impacts that create more than 12,500 local jobs with an estimated payroll in excess of $210 million.

Hotel Development

Norfolk has approximately 5,000 hotel rooms, including nearly 1,650 in the Downtown area. Tourism and conventions employ over 7,000 workers in the City and generate an estimated $28.8 million in state taxes and $23.9 million in local tax revenue. It is estimated travelers to the City spend over $764 million annually. The new Hilton Norfolk at The Main and The Exchange conference center opened March 2017. The $164 million public/private Downtown project includes a 50,000 square foot conference center; a 4-Star Hilton hotel with approximately 300 rooms, three full-service restaurants and a parking garage. The project has created approximately 250 jobs and an estimated $2 million in annual tax revenue. It was developed by Gold Key PHR Hotels and Resort.

Development is underway on an Autograph Collection Marriott hotel, a boutique hotel to be located at the 200 block of Granby Street in the former Royster building. The $27 million investment will have a glass art theme, and is expected to open in 2018.

Waterfront Recreation Investment

Norfolk has seven miles of Chesapeake Bay beachfront and a total of 144 miles of shoreline including along Downtown's Elizabeth River, the Lafayette River, lakes, the Hampton Roads Harbor and the Chesapeake Bay. Town Point Park, located in the Downtown area along the Elizabeth River, brings thousands of visitors Downtown annually and generates both tax and parking revenue.

The Waterside District is a regional destination located in the heart of the central business district and adjacent to the City of Norfolk's world-class waterfront and festival site. The project which opened in May 2017, is a $40 million public-private partnership between Norfolk and Cordish Companies. The anchor is a 30,000 square foot section known as "The Marketplace" that has as many as nine businesses and restaurants, including a live performance stage and roof top deck.

Sports and Recreation

Norfolk is home to the Norfolk Tides, a AAA minor league baseball team (the "Tides"), which is an affiliate of the Baltimore Orioles. The Tides renewed their 15-year lease at Harbor Park in December 2013. Norfolk is also home to the Norfolk Admirals, a member of the East Coast Hockey League. Old Dominion University competes in the Conference USA. Norfolk State University has a long-established football program, which currently competes in the Mid-Eastern Athletic Conference.

Additionally, located at Harbor Park is the Norfolk Boxing Center, a 13,000 square foot state-of-the-art facility that boasts two U.S.A. Boxing regulation-sized competition rings, stadium-style seating and the capacity to host larger shows and championship bouts.

Norfolk's Educational Institutions

Available within the City are a wide variety of educational facilities including public elementary, middle and high schools, private and parochial schools, two universities, one community college and a medical school.

Public Schools

Norfolk public schools have a low pupil-teacher ratio with class sizes below the national average. Norfolk offers innovative public school programs, which include Early Childhood Education, a unique, comprehensive program for three and four-year-olds and their parents located in the public housing community of Diggs Town, at the Park Place/Colonial Place Community Center and at Ocean Air Elementary.

The City is home to the Governor's Magnet School for the Arts, Virginia's only magnet school for the arts, which offers classes in performing or visual arts to approximately 300 students from six cities and two counties in its Downtown location in Norfolk on Granby Street in 2014.

School construction remains a priority for the City, demonstrated by the commitment to build or replace five schools. The first school replaced was Crossroads Elementary, which opened in 2012. Additionally, Campostella K-

8 and Broad Creek Elementary School opened in September 2016 and Larchmont and Ocean View Elementary Schools opened September 2017. Camp Allen will be the final school to open and will be completed in two phases. Phase 1 is scheduled to be completed in October 2018 and Phase 2 in October 2019. The Department of Defense will pay 80% of the construction costs. A dedicated two-cent real estate tax increase from July 1, 2013, supports the City's School Construction, Technology, and Infrastructure (CTI) Program. The tax increase accelerates the funding for school construction projects and frees up capacity to address infrastructure and neighborhood capital needs Citywide.

Student population for the past five Fiscal Years is shown in Table D-11.

Table D-11
City of Norfolk, Virginia
Public Schools Student Population
Fiscal Years 2013 – 2017

Fiscal Year	September 30 Membership	Percent Change
2013	30,702	(1.41)%
2014	30,359	(1.12)
2015	30,116	(0.80)
2016	29,977	(0.46)
2017	29,383	(1.98)

Source: Virginia Department of Education, Superintendent's Annual Report.

Higher Education

Norfolk is home to four institutions of higher learning: ODU, Norfolk State University, Tidewater Community College and Eastern Virginia Medical School. ODU is one of only 100 public research universities nationwide. Norfolk State University is Virginia's largest public, historically black university and one of the largest predominately black institutions in the nation. Located in Downtown, Tidewater Community College has five buildings, including the Jeanne and George Roper Performing Arts Center. Eastern Virginia Medical School, dedicated solely to biomedical and health education, has an economic impact on the regional economy of $824 million annually.

Norfolk's Medical Institutions

Within the City, there are five general, acute care and specialized hospitals including Sentara Norfolk General Hospital ("Sentara Norfolk General"), Sentara Leigh Hospital, Bon Secours DePaul Medical Center, Children's Hospital of The King's Daughters ("CHKD") and Lake Taylor Transitional Care Hospital ("Lake Taylor Transitional"). Sentara Norfolk General is home to the region's heart hospital and only Level 1 trauma center. Sentara Norfolk General Hospital embarked in 2016 on a $199 million expansion and modernization project to be completed in 2020. The project will add floors to two existing wings, expand the emergency department, expand and modernize 18 operating rooms, replace a 48-bed ward-style Special Care Nursery with a state-of-the-art unit with private and semi-private rooms, and consolidate the hospital's 54 intensive care unit beds on two floors. CHKD, the site of Virginia's only free-standing, full-service pediatric hospital is home to one of the nation's top pediatric residency programs. With 206 beds, the hospital serves the medical and surgical needs of children throughout the greater Hampton Roads metro area, the eastern shore of Virginia and northeastern North Carolina.

Sentara Leigh Hospital's $126 million expansion was completed in 2016. The expansion project included two five-story patient towers, an orthopedic and rehabilitation center, and a two-story atrium lobby, as well as a new multi-story parking garage. Bon Secours DePaul Medical Center has undergone a substantial phased expansion over the past five years including a new comprehensive cancer care facility and medical office building on the campus.

The Virginia Port Authority

In 1981, the General Assembly passed landmark legislation designed to unify the ports in southeastern Virginia Hampton Roads harbor under a single agency, the Virginia Port Authority, with a single operating company, the Virginia International Terminals, Inc. The Port of Virginia (the "Port"), one of the world's largest natural deep-water harbors, is an integral part of Norfolk's economy. The Port is one of the top three ports on the east coast in terms of total value of port trade. In 2017, the Port handled a total of 21,971,718 tons of general cargo, including 21,784,594 tons of containerized cargo, with 187,124 tons of breakbulk making up the remainder.

Table D-12
Virginia Port Authority Terminals
General Cargo Tonnage
Calendar Years 2013 – 2017

Calendar Year	Total General Cargo Tonnage (in thousands)	Percent Change over Previous Year
2013	18,840	7.49%
2014	19,061	1.17
2015	19,978	4.81
2016	20,869	4.50
2017	21,972	5.30

Source: Virginia Port Authority.

Increase in the port-related business use of the Virginia International Terminals drives new capital investment into the region. The Heartland Corridor gives the Port rail access to markets in Ohio, Illinois, Michigan and points west. Additionally, a 300-acre expansion of Norfolk International Terminal ("NIT") has been announced and is expected to be the largest inter-modal center in the United States.

In 2016, the Port received a $350,000,000 investment from the Commonwealth to expand the cargo capacity at NIT's South Berth to increase capacity by 46%, as well as improve the speed at which the cargo moves through the area.

Business, Industry and Commerce

Several major companies are headquartered in Norfolk, including:

- Norfolk Southern, a Fortune 500 company and one of the country's largest railroad operators;
- Landmark Communications, one of the country's largest privately-owned media companies with ownership of several daily newspapers, local TV stations and specialty publications;
- Dominion Enterprises, a wholly-owned subsidiary of Landmark Communications, Inc., is a print and internet media group that includes numerous specialty publications and online classifieds;
- FHC Health Systems, one of the top 250 largest private companies in the country, specializing in health care management, health services and online medical reports;
- CMA-CGM Inc., the America's Headquarters, one of the world's largest container transportation and shipping company;
- Sentara Healthcare, a not-for-profit organization that operates a network of hospitals and other health facilities primarily in the coastal Hampton Roads area of southeastern Virginia;
- MDV is recognized as one of the premier worldwide grocery distributors; providing service to both Continental United States and Outside the Continental United States commissaries and exchanges; and
- Bauer Compressor, North America's headquarters of the Munich, Germany company, has been located in Norfolk for more than 30 years and is a leading manufacturer of air compressor equipment.

There are a large variety of industrial, commercial and service employers located within the City. Table D-13 below presents data regarding the major non-government employers in the City.

Table D-13
City of Norfolk, Virginia
Major Non-Government Employers in 3rd Quarter 2017

Company	Number of Employees	Product/Service
	1,000+	
Sentara Healthcare		Hospitals
Old Dominion University, Norfolk		Educational Services
Children's Hospital of the King's Daughters		Hospitals
Eastern Virginia Medical School		Educational Services
Sentara Norfolk General Hospital		Hospitals
Landmark Interactive		Internet Advertising & Marketing Services
Landmark Media Enterprises LLC		Media & Advertisement
Sentara Leigh Hospital		Hospitals
YMCA of South Hampton Roads		Gym
BAE Systems		Defense, Security and Aerospace Technology
	500 – 999	
Wal-Mart		General Merchandise Stores
CMA-CGM America		Support Activities for Transportation
Kaufman & Canoles		Attorney
Capital Group Co Inc.		Financial Investments
Beacon Health Options Inc		Health Care Analysis
MDVA Spartan Nash Co.		Military Food Distribution
American Funds		Financial Investments
Aramark		Food Services
Nasscco Norfolk		Full Service Shipyard
Norfolk Southern		Premier Transportation Company
Yellow Cab		Taxi Services
	250 – 499	
Colonnas Shipyard		Transportation Equipment Manufacturing
Virginia International Terminal		Support Activities for Transportation
Dominion Enterprises		Media & Information Services
Eggleston Services Inc.		Education Services
Lake Taylor Transitional Care		Hospital
Marriott-Norfolk Waterside		Hotels
Barry Robinson Center		Community Services
US Foods		Food Distribution Service
Dillard's		Department Store
CHKD Thrift Stores		Thrift Stores
Virginia Paving Co.		Paving Contractor
Norfolk Southern Railway Co.		Railway Services
Sentara Nursing Center		Assisted Living Facility Consultants
Booz, Allen and Hamilton		Professional, Scientific and Technical Services
American Refrigeration Supplies		Wholesale Heating Equipment & Systems
Sheraton Norfolk Waterside Hotel		Hotels
Hampton Roads Transit		Administration of Economic Programs
Nordstrom		Department Stores
Triump Moving & Storage Inc.		Piano & Organ Moving
Zim American Integrated Shipping Services		Support Activities for Transportation

Source: Virginia Employment Commission.

New development, expansion and retention of Norfolk's business community has led to continued economic growth over the past five years. Recent growth in areas such as manufacturing, research and technology, healthcare, residential apartments, craft brewing and boutique retail has increased the diversification of Norfolk's local economy. Since 2013, the City has realized over $2.4 billion in new development, business expansion and announcements of pending projects.

Table D-14
City of Norfolk, Virginia
Business Growth
A Sampling of Business Activity in 2013 – 2017

Company	Types	E/N	C/D/A	Investment (millions)
151 and 161 Granby	Conversion of office/retail buildings in 44 apartments	E	D	$10
201 Twenty-One	Mixed-use residential apartments and retail	N	C	40
824 Military	Renovation of former retail space into office space	E	C	18
Atlantic at City Walk	Renovation of Class B to Class A space	E	C	50
Autograph Hotel	120-room boutique hotel Downtown	E	D	27
Banks at Berkley	155 new apartments	N	C	8.5
Barry Art Museum	ODU art museum	N	D	12
Bauer Compressor Facility	Expansion of existing Norfolk business	E	D	15
Belmont at Freemason	Apartments	N	C	45
Bon Secours DePaul	New medical building	N	C	25
CIRS	New advanced manufacturing building	N	D	TBD
Claremont Apartments	156 apartments and 25 single-family homes	N	C	20
CMA-CGM	Americas Headquarters, shipping line	E	C	11.5
Colonna's Shipyard	Expansion to add larger dry dock	E	D	30
Commander Corporate	Second office building for spec	N	C	12
Court Complex	New combined Court Complex	N	C	123
East Beach Marina Apartments	136 apartments in East Beach	N	C	25
Eastern Virginia Medical School	New education and academic administration building	N	A	TBD
Eastern Virginia Medical School	New education and research building	N	C	80
450 Bousch	150 apartments with first floor retail Downtown	N	C	30
Element at Ghent	164 new luxury apartments	N	C	26
Fort Norfolk Plaza	Mixed-use medical office, retail	N	C	70
Ghent Station	New medical space and retail	N	C	17.5
Glass Wheel Studio	Contemporary art gallery and working studios	E	C	2.5
Hampton Roads Barge Co.	New transportation/shipping company	N	C	2.3
Harbor's Edge Phase II	Residential retirement community	N	A	100
Harris Teeter Expansion	Replacement of existing grocery store	E	C	14
Harris Teeter	Construction of new store at Wards Corner	N	C	18
Hurrah Players	Theatre, dance, voice and acting troupe	N	C	1.4
Icon at City Walk	Conversion of building into apartments	E	C	100
IKEA	Construction of new retail store at Lake Wright East	N	D	75
Kroc Center	Community center	N	C	84
Lamberts Point	Recreation facility	N	C	7.6
MacArthur Memorial	Expansion	E	C	5
Hilton and Conference Center	New hotel and conference center	N	C	126
Marine Hydraulics	Expansion	E	C	82
Metro on Granby	Two new apartment buildings on Granby Street	N	C	24
Norfolk Premium Outlets	Includes 90 to 120 new stores	N	C	75
Norfolk State University	Library and student center	N	C	75
Old Dominion University	Innovations Research Park II	N	C	22.5
Old Dominion University	Student fitness center	N	C	28
Old Point National Bank	New branch office in Ghent	N	C	2.8
Passenger Rail Facility	Station for new Amtrak service	N	C	3.8
Pinewell Station	145 apartments in Ocean View	N	A	22
Railyard at Lamberts Point	Mixed-use retail	N	A	50
Residence Inn by Marriott	Extended-stay hotel	N	C	35
Riverside Terrace / Westport	Phasing townhouses and condominiums	N	D	80
Saint Paul's Apartments	120 apartments in Saint Paul's Community	N	D	TBD
Sentara Offices	48,000 sq. ft. office at Poplar Halls	N	D	9
Sentara Norfolk General	Expansion and modernization project	E	D	199
Sentara Garage	Colley Avenue	N	C	15
Sentara Leigh Hospital	Two new patient towers	E	C	126
Sentara Leigh Cancer Center	230,000 sf cancer center	N	A	TBD
Sheraton Hotel	Renovation	E	C	32
Slover Library	Construction of new main library	N	C	64
Tidewater Community College	Student center	N	C	17.6
The Market at Ghent	Expansion to existing Farm Fresh store	E	C	3
The River House Apartments	197 apartments	N	C	36
Virginia Arts Festival	Offices and rehearsal studios	N	C	7.5
Virginia Zoo	Animal Wellness Center	E	C	4.3
Waterside District	Premier dining, entertainment and retail	E	C	40
Wells Fargo Center	Mixed-use office, retail and residential	N	C	170
			Total	**$2,481**

Source: Economic Development Department, City of Norfolk, Virginia.
Note: E/N – Expansion or New; C/D/A – Completed, Under Development or Announced. Amounts and projects are subject to change.

Military

The presence of the military in Norfolk has a significant impact on the local economy. The City is the home of the world's largest naval complex, celebrating its centennial in 2017, with headquarters for Commander in Chief of U.S. Atlantic Command, NATO's Supreme Allied Command Atlantic, Commander in Chief U.S. Atlantic Fleet and other major naval commands. Hampton Roads is the largest center of Coast Guard units in the world with the Atlantic Area Command and Maritime Defense Zone Atlantic in Portsmouth and its Maintenance & Logistic Command Atlantic headquarters in downtown Norfolk.

The military assigns to and reassigns from its various locations within the region ships, squadrons and personnel on a regular basis. Due to the ongoing military presence, the arrivals and departures from the region do not typically have a material impact on the economic condition of the City.

The Hampton Roads region is home to six aircraft carriers. While not a permanent homeporting, it will mean the 2,500 plus personnel from the Gerald R. Ford will be in the region for a few years due to schedule and maintenance requirements for the Navy. The additional carrier joined the USS Dwight D. Eisenhower, USS Abraham Lincoln (currently undergoing overhaul at Newport News Shipbuilding), USS Harry S. Truman, USS George Washington and the USS George H.W. Bush at Naval Station Norfolk.

According to the most recent data available to the City, the U.S. Navy's direct economic impact on the region was $12.3 billion in Fiscal Year 2016, comprised of a total annual payroll of $10.1 billion and the balance consumed on goods and services and procurement contracts. The region and particularly the City expects to continue as a center of activity for the U.S. Navy with current total personnel (military and civilian) of more than 70,000, with an additional 6,000 military contractor personnel. In addition, the Hampton Road's region is home port to approximately 67 ships and home to 37 aircraft squadrons.

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APPENDIX E

SUMMARY OF WHOLESALE CONTRACTS

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INTRODUCTION

The City maintains wholesale contracts or water service agreements with Chesapeake, Virginia Beach, Portsmouth, the WTWA and the Navy. These contracts and agreements set forth the amount of water to be sold, rate setting procedures, metering points, dispute resolution and other matters.

The descriptions of the contracts and agreements set forth below are brief outlines or summaries of certain of their provisions. Such outlines and summaries do not purport to be complete, and reference should be made to each respective contract or agreement. Copies of the contracts and agreements may be obtained from the City for a full and complete statement of their provisions.

Capitalized terms used and not defined in this Appendix E shall have the meanings given them in the applicable water service contract or agreement.

VIRGINIA BEACH, VIRGINIA

The City of Norfolk ("Norfolk") and the City of Virginia Beach ("Virginia Beach") entered into a Water Services Contract originally dated July 14, 1993, and amended and restated as of February 14, 2001 (as amended and restated, the "Water Services Contract"). Capitalized terms used in this Appendix are defined in the Water Services Contract or in the Official Statement.

The Water Services Contract provides for Norfolk to store, wheel and treat Virginia Beach's Gaston and Stumpy Lake water (sometimes referred to herein as "Virginia Beach Water").

Term of Contract.

The Water Services Contract is in effect until June 30, 2030, unless earlier terminated.

Water Treatment, Delivery Services and Obligations.

Norfolk must receive and store Virginia Beach Water at locations satisfactory to both parties, transport the water through Norfolk's raw water system, treat the water, provide clear well storage, pump and transport the treated water to the metered points of delivery for the Virginia Beach Water distribution system, and perform all related acts to provide treated water to Virginia Beach. Virginia Beach must pay for these services and provide Virginia Beach Water. The Water Services Contract is a water services contract, not a contract for the sale of treated water, and the right of Virginia Beach to receive treated water under the Water Services Contract is dependent on Virginia Beach's ability to provide Virginia Beach Water, including, but not limited to, obtaining all necessary permits from governmental agencies, and constructing, operating and maintaining the Gaston pipeline, Stumpy Lake and Stumpy Lake pipeline providing Virginia Beach Water to discharge points satisfactory to Norfolk and Virginia Beach. Norfolk must obtain all permits required to construct, operate, maintain or expand Norfolk's water system in conjunction with performance of the Water Services Contract; provided, however, in obtaining or retaining any permit, Norfolk is only required to use its good faith best efforts by all reasonable legal means. Virginia Beach and Norfolk must cooperate and assist each other in obtaining the permits. Norfolk must also keep and maintain its water facilities in good working order in accordance with generally accepted standards for the operation and maintenance of a water system.

Except as otherwise provided in the Water Services Contract, Norfolk must deliver treated water to the Virginia Beach distribution system in such amounts as required by Virginia Beach, up to a total annual average amount of 45 mgd, but not to exceed 0.9 times the maximum sustainable rate of Gaston water which Virginia Beach is capable of delivering to Norfolk for Virginia Beach's use, plus 1.8 mgd for Stumpy Lake water. If the Stumpy Lake contract capacity increase option is exercised (as described under the caption "Effective Date" below), the maximum permissible total annual average amount stated above shall increase by 1.8 mgd to 46.8 mgd.

Virginia Beach is obligated to supply additional Virginia Beach Water above the Virginia Beach current monthly demand if requested by Norfolk, but is not required to supply an amount of Virginia Beach Water in any consecutive 36-month period in excess of the amount of treated water delivered to Virginia Beach under the Water Services Contract during the same period adjusted for certain losses.

Norfolk is obligated to exercise due care and adhere to generally-accepted engineering practices in the planning, construction, operation, maintenance, and expansion of its water system in order to meet its obligations under the Water Services Contract. Norfolk may not use, sell, assign, or otherwise commit to supply water in excess of Norfolk's safe yield, transmission or treatment capacity except as otherwise provided in the Water Services Contract. Norfolk may sell water, pursuant to a written contract, in excess of its safe yield on an interruptible basis to industrial customers having installed and permitted alternate water sources available, with the consent of Virginia Beach, such consent not to be unreasonably withheld. Norfolk must terminate or restrict the supply of water to such interruptible customers (in accordance with the terms of each contract) in order that Norfolk can meet its obligations to Virginia Beach under the Water Services Contract.

Delivery Points and Measurement.

Norfolk must deliver treated water to Virginia Beach at the delivery points set forth in the Water Services Contract, and at such additional points as may be mutually agreed upon by the parties. Unless otherwise agreed by both parties, Norfolk must construct, own and maintain treated water meter vaults, meters, and all associated facilities located at the delivery points. Virginia Beach must provide Norfolk's employees and agents ingress and egress across property owned by Virginia Beach to all of Norfolk's premises inside Virginia Beach's boundaries to install, operate, inspect, test, and maintain pipelines, pump stations, and facilities, and to read meters owned or maintained by Norfolk within the city limits of Virginia Beach or on property controlled by Virginia Beach. Virginia Beach must install and operate raw water meter or meters capable of measuring the amount of water being delivered from the Gaston pipeline and the Stumpy Lake pipeline to Norfolk including totalizing and recording total flow and daily rates of flow. Each meter must be tested at least once every two years.

Quality and Pressure of Water Delivered to Virginia Beach.

Norfolk must provide the necessary water treatment facilities, operational practices and related services to ensure that the quality of treated water delivered to Virginia Beach pursuant to the Water Services Contract meets all potable water standards mandated by federal and state law, rule or regulation. Except as otherwise provided in the Water Services Contract, Virginia Beach bears the sole responsibility for maintaining water quality beyond the delivery points within the Virginia Beach distribution system.

Rates and Charges.

Method of Rate Determination. The annual rates charged by Norfolk for rendering treated water service under the terms of the Water Services Contract are based upon the utility basis of cost of service principles established by the American Water Works Association. Under such principles, Virginia Beach is charged for treated water service in a manner which recovers its allocable share of operation and maintenance expense, depreciation expense and return on rate base associated with the Norfolk water system.

Operation and Maintenance Expense. Virginia Beach must pay its share of annual expenses of the Norfolk water system, including appropriate departmental and city general overhead and payments in lieu of real estate and tangible personal property taxes, excluding payments to Norfolk's general fund and certain non-common payments.

Depreciation Expense. Virginia Beach must pay an annual depreciation expense associated with the Virginia Beach rate base, excluding construction work in progress.

Return on Rate Base. Virginia Beach must pay to Norfolk an annual return on the Virginia Beach rate base. The annual rate of return to be applied to the Virginia Beach rate base is computed by multiplying the embedded effective average annual interest cost of the Norfolk Utilities Department water system debt for the applicable rate year by 1.25.

Rate Base. The rate base for the purposes of the Water Services Contract is the original cost of the Norfolk water system less accrued depreciation (as shown on Norfolk's books and records). The rate base includes construction work in progress, expenditures which have been paid by Norfolk at the time of rate determination, and general facilities related to the Norfolk water system.

The rate base is allocated between Virginia Beach and Norfolk based on the contract allocation capacities and safe yield of Virginia Beach compared to the capacities of the Norfolk water system facilities serving Virginia Beach and the combined system safe yield. All facilities in the Norfolk water system providing service or benefit to Virginia Beach, including raw water supply, storage and transmission, treatment, pumping, storage, and treated water transmission mains, meters, and administrative and general facilities are included in the rate base subject to allocation to Virginia Beach. Excluded from the rate base subject to allocation to Virginia Beach are: fire hydrants; retail meters and services; all transmission and distribution facilities not used to serve Virginia Beach; and land, land rights and general plant related to excluded items; and certain contributed capital.

Fixed Capacity Charge. Virginia Beach must pay an annual fixed capacity charge sufficient to recover depreciation expense and the return on the Virginia Beach rate base. This fixed capacity charge is payable in equal monthly amounts during the year or years for which rates are applicable.

Demand Charge. Virginia Beach must pay an annual unit demand charge per mgd applied to the measured coincidental maximum hourly demand of Virginia Beach. The annual unit demand charge is based on the common-to-all operation and maintenance expense of the facilities providing service to Virginia Beach, excluding the energy portion of power costs, chemical costs, sludge disposal and other costs which vary directly with volume of treated water produced. The annual unit demand charge per mgd is 1.01 times the result of dividing the common-to-all operation and maintenance expense described in the preceding sentence by the sum of the Virginia Beach and Norfolk noncoincidental maximum hourly pumpage outputs at the Norfolk treatment plants providing service to Virginia Beach.

Supplemental Demand Charge. In the event that Virginia Beach's maximum hourly demand exceeds its contract hourly demand rate of 90 mgd, Virginia Beach must pay a supplemental demand charge for that portion of its maximum hourly demand which exceeds 90 mgd. The amount of the supplemental unit demand charge is equal to two (2) times the unit demand charge as determined in accordance with the formulas set forth above. If the Stumpy Lake contract capacity increase option is exercised (as described under the caption "*Effective Date" below*), the maximum hourly demand rate above shall be 93.6 mgd.

Commodity Charge. Virginia Beach must pay a commodity rate per 1,000 gallons of treated water. This charge is sufficient to recover the energy portion of power costs, chemical costs, sludge disposal, and other costs which vary directly with the volume of treated water produced. The Virginia Beach commodity charge is 1.01 times the amount determined by dividing the total variable cost described in the preceding sentence for the Norfolk water treatment plants providing service to Virginia Beach by the total treated water volume output of such Norfolk water treatment plants, in thousands of gallons.

Biennial Adjustment of Rates. Norfolk is obligated to develop projections of rates applicable to Virginia Beach for treated water service on a biennial basis based on a cost of service study prepared by an independent consulting firm. The projections of rates, along with a copy of the cost of service study, must be submitted to Virginia Beach not less than 120 days prior to the beginning of the two-year period. Virginia Beach will be billed monthly for treated water service by Norfolk using the projected rates applicable to water use beginning with the first day of the applicable Fiscal Year and for the remainder of the two Fiscal Years. Such projections of rates, however, may be revised at any time, upon 60 days' advance notice, during the two Fiscal Years by Norfolk should unexpected significant increases or decreases in Virginia Beach's allocated portion of Norfolk's water system costs occur during the Fiscal Years; however, Norfolk may not adjust Virginia Beach's rates more than once during the two-year period unless it also adjusts rates to its own retail customers.

Within six months after the end of the second Fiscal Year, Norfolk must complete and submit to Virginia Beach a true-up schedule of rates and annual billings applicable to the previous two Fiscal Years which reflects an allocation of costs of service based on actual cost and experience incurred by the Norfolk water system as shown in the audited books and records of Norfolk. The February 2001, amendments to the amended and restated water services contract clarified the contract's methodology as to cost of service and true-up adjustments. Any resulting credits or payments applicable to treated water service resulting from a true-up shall be divided into twelve equal payments or credits to be paid or applied during the second Fiscal Year.

<u>Source and Priority of Payments</u>.

Source of Payment. Virginia Beach must make payments of all charges for treated water service, as well as charges upon termination of the Water Services Contract (the "termination payments") and any other charges payable under the Water Services Contract, solely from revenues received by Virginia Beach from charges paid by users of its water and sewer system and available to it for such purposes for so long as Virginia Beach operates its water and sewer system on a combined basis; provided, however, if Virginia Beach chooses to operate its water system separate and apart from its sewer system, then such charges must be paid solely from revenues of its water system. The charges payable under the Water Services Contract are not deemed to create or constitute an indebtedness or a pledge of the faith and credit of the Commonwealth or of any county, city, town or other political subdivision thereof, including Virginia Beach, for purposes of any constitutional, statutory or charter limitations.

Characterization of Charges under the Water Services Contract. The demand charge, supplemental demand charge, commodity charge, fixed capacity charge and termination payments are deemed to be a part of the annual operating expense of the Virginia Beach water and sewer system, or the water system, as applicable.

Except as described in the following paragraph, the demand charge, supplemental demand charge, commodity charge, fixed capacity charge and termination payments must be paid prior to the debt service on any water and sewer revenue bonds or double barrel bonds of Virginia Beach.

The payment of the fixed capacity charge is on parity with the payment of debt service on certain bonds of Virginia Beach. The payment of the termination payments is subordinate to the payment of debt service on such bonds.

Other than as described above, Virginia Beach will not issue any water and sewer revenue bonds or double barrel bonds as long as the Water Services Contract is in full force and effect (including (i) certain refunding bonds and (ii) revenue or general obligation bonds, the proceeds of which finance the cost of termination payments), the debt service on which will be payable prior to or on parity with Virginia Beach's payment obligations under the Water Services Contract (<u>i.e</u>., the demand charge, supplemental demand charge, commodity charge, fixed capacity charge and termination payments). Virginia Beach may not amend or supplement its Master Bond Resolution or enter into any successor indenture, trust agreement or resolution pledging the revenues of its water and sewer system, or its water system, as applicable, in such a way that will subordinate or adversely affect the pledge or the dignity thereof securing its payment obligations under the Water Services Contract (including the termination payments), without the written consent of Norfolk.

Issuance of Bonds. Virginia Beach retains the right under the Water Services Contract to issue either its revenue or general obligation bonds, the proceeds of which will finance the costs of making the termination payments. The determination as to whether to issue such bonds is within the complete control of Virginia Beach.

Rate Covenant. Virginia Beach must fix, charge and collect such rates, fees and other charges for the use of and for the services furnished by its water and sewer system, or its water system, as applicable, and must from time to time and as often as shall appear necessary, revise such rates, fees and other charges so that revenues received from its water and sewer or its water system, as appropriate, will be sufficient in each year to pay all amounts due under the Water Services Contract and all other operation and maintenance expenses of its water and sewer system, or its water system, as applicable.

<u>Reduced Water Usage by Virginia Beach</u>.

If Virginia Beach receives reduced quantities of treated water from Norfolk because Virginia Beach has developed or acquired additional treated water supplies, Virginia Beach must for the duration of the Water Services Contract pay the annual fixed capacity charge, and the commodity rate for the actual treated water delivered to Virginia

Beach. In addition, for a period of three years, Virginia Beach must pay the annual demand charge applied to the greater of its hourly demand for the year or the highest maximum hourly demand experienced during the five (5) years immediately preceding the reduction.

Curtailment.

The parties acknowledge in the Water Services Contract that supply or treatment problems may occur which prevent or limit Norfolk's ability to deliver treated water to Virginia Beach and/or Norfolk's other treated water customers. In the event that the conditions which prevent or limit Norfolk's ability to deliver treated water to Virginia Beach are applicable to other of Norfolk's customers, Norfolk must seek and, to the extent permitted by federal and state laws and regulations and national security constraints as declared by an official of the United States, enforce the imposition of treated water curtailment upon all affected customers, retail, wholesale or otherwise, in order that all such treated water customers will be similarly affected. If water supplies or services are curtailed in accordance with the procedures set forth above, Virginia Beach and Norfolk are obligated to cooperate by imposing conservation measures upon their respective customers. Neither Norfolk nor Virginia Beach are required to impose curtailments of water supply which would violate any requirements imposed by the State Water Control Board and other state and federal agencies and laws.

Force Majeure and Hold Harmless.

Norfolk is not liable to Virginia Beach for any act, omission, or circumstances occasioned by or in consequence of any act of God, strikes, lockouts, acts of the public enemy, wars, etc.

In case of breaks in the mains, or malfunction of pumping machinery, or other water works equipment, or the occurrence of any other event which makes it necessary temporarily to reduce pressure or cease delivery of water to Virginia Beach, Norfolk must, if practicable, give previous notice of one week. In no case may any claim for damage due to reduced water service or pressure be made by Virginia Beach, and Virginia Beach must hold Norfolk harmless from any third-party suit arising from, or related to, reduced water service or pressure on the Virginia Beach distribution system unless Norfolk's negligence was the cause of the reduced water service or pressure.

Virginia Beach must hold harmless and indemnify Norfolk against any claims or losses arising from receipt of Virginia Beach Water by Norfolk or delivery by Norfolk of treated water to Virginia Beach, unless Norfolk's negligence or failure to comply with its water quality obligations was the cause of the damage which gave rise to the claim or loss.

Stumpy Lake Contract Capacity Increase.

By reason of Virginia Beach's acquisition of Stumpy Lake, Virginia Beach may desire to request an increase of the Virginia Beach contract capacities provided for in the Water Services Contract, from an annual average day rate of 45 mgd to 46.8 mgd, a maximum day rate of 67.5 mgd to 70.2 mgd, and a maximum hour rate of 90 mgd to 93.6 mgd. Norfolk, in its sole opinion, shall determine whether existing uncommitted constructed capacity exists in Norfolk facilities capable of meeting any of such additional contract capacities. Upon affirmative notice by Norfolk of such existing uncommitted constructed capacity, the increased contract capacities shall become effective on July 1 of the following year.

Breaches Related to Treated Water Safe Yield.

If Virginia Beach's treated water average day demand (measured at the metering points) exceeds the lesser of 45 mgd or 99.0% of its treated water safe yield, Virginia Beach must reduce its treated water usage such that it does not exceed the lesser of 45 mgd or 99.0% of its treated water safe yield. In such event, Virginia Beach must institute adequate measures to ensure that its demand does not exceed the lesser of 45 mgd or 99.0% of its treated water safe yield. In addition, in such event, Norfolk may restrict the amount of treated water Virginia Beach may receive to ensure that the usage of Virginia Beach does not exceed the lesser of 45 mgd or 99.0% of its treated water safe yield. If the Stumpy Lake contract capacity increase option is exercised, Virginia Beach's maximum permissible annual average day demand of 45 mgd shall be 46.8 mgd.

If the Virginia Beach average day demand (measured at the metering points) exceeds the lesser of 45 mgd or 99.0% of its treated water safe yield, for a Fiscal Year, then Virginia Beach must pay a supplemental charge for all usage above the lesser of 45 mgd or 99.0% of its treated water safe yield in addition to all other charges provided in the Water Services Contract. The supplemental charge is the rate of $4.00 per 1,000 gallons multiplied by the sum of 1 plus .05 times the number of years since 1990. If the Stumpy Lake contract capacity increase option is exercised, Virginia Beach's maximum permissible annual average day demand of 45 mgd shall be 46.8 mgd.

If the combined treated water average day demand of Norfolk and all of its treated water customers (measured at the treatment plants), excluding Virginia Beach and any other customers for which and to the extent that Norfolk wheels and treats raw water (adjusted for losses), exceeds Norfolk's treated water safe yield, then Norfolk must reduce its usage and that of its treated water customers, other than Virginia Beach and any other customers for which and to the extent that Norfolk wheels and treats their raw water (adjusted for losses), such that their combined treated water usage does not exceed Norfolk's treated water safe yield. In addition, in such event, Norfolk must at the request of Virginia Beach, to the extent permitted by federal and state laws and regulations and national security constraints as declared by an official of the United States, restrict the amount of treated water that Norfolk and its customers may receive to ensure that the combined usage of Norfolk and its customers (excluding Virginia Beach and any other customers for which and to the extent that Norfolk wheels and treats their raw water (adjusted for losses)) does not exceed Norfolk's treated water safe yield.

If the combined treated water average day demand of Norfolk and its customers (excluding Virginia Beach, any other customers for which and to the extent that Norfolk wheels and treats raw water, adjusted for losses, and interruptible) at the treatment plants exceeds Norfolk's treated water safe yield for a Fiscal Year, then it must pay a supplemental charge to Virginia Beach for all use above Norfolk's treated water safe yield. The supplemental charge is equal to $4.00 per 1,000 gallons multiplied by the sum of 1 plus .05 times the number of years since 1990.

Breaches Related to Contract Capacities.

If Virginia Beach's average day, maximum day or maximum hour demand exceeds the capacities contracted for and set forth in the Water Services Contract, then Virginia Beach must reduce its treated water demands to the average day, maximum day, and maximum hour capacities for which it has contracted in the Water Services Contract. To ensure that the necessary reductions do occur, Virginia Beach must institute adequate conservation measures. In addition, in such event, Norfolk may restrict the rate at which Virginia Beach may receive water to ensure that the demands of Virginia Beach do not exceed the average day, maximum day, or maximum hour capacities for which Virginia Beach has contracted.

Other Breaches.

If either party breaches any term of the Water Services Contract, the other party must give written notice of the breach, identifying the provision(s) of the Water Services Contract which are being breached. The breaching party has six months from the date of the notice within which to cure the breach. In the event the breach remains uncured for six months, then the breaching party must pay to the other, for each 30 days or portion thereof the breach remains uncured, in addition to all other payments due under the Water Services Contract, an amount, beginning with the seventh month, equal to 10% of the total charge for water on a monthly basis due by the City of Virginia Beach to Norfolk. This 10% amount increases to 50% should the breach remain uncured for an uninterrupted period of twelve months. However, no payment is required so long as the party in breach makes a continuous, good faith effort to cure the breach. These provisions of the Water Services Contract do not apply to the conditions, breaches and circumstances with respect to rates and charges or breaches related to treated water safe yield.

Termination by Norfolk.

Norfolk may terminate the Water Services Contract if one of the following events occurs:

(a) The Gaston pipeline is not 50% complete by June 30, 1998, with (i) all permits and approvals still in force for the construction in progress and (ii) all permits and approvals necessary to withdraw water from Lake Gaston and have the pipeline fully operational.

(b) The Gaston pipeline is not 100% complete and fully operational by June 30, 2000, with all permits and approvals still in force.

(c) Virginia Beach does not give authorization for the construction of the Plant Hydraulic Improvements prior to January 1, 1997.

(d) Virginia Beach does not pay in full a statement within 120 days of receipt unless the unpaid portion of such statement has been submitted to the dispute resolution process set forth in the Water Services Contract.

(e) Virginia Beach has a total and permanent loss of ability to deliver Virginia Beach Water to Norfolk, including, but not limited to, equipment failure or destruction, or the loss of any required permit, approval, or authority. Such loss is deemed permanent if it continues for twenty-four consecutive months.

(f) Virginia Beach willfully and continuously breaches any term of the Water Services Contract which significantly affects the operation of the Water Services Contract.

Upon termination of the Water Services Contract by Norfolk after the Gaston Pipeline is fully operational, Virginia Beach may receive water from Norfolk (in amounts to be determined by Norfolk) for three years after the effective date of termination, if Norfolk has sufficient surplus water available, provided, however, if there is a then existing surplus water contract between Norfolk and Virginia Beach, then the terms of the surplus water contract govern. Virginia Beach must pay for all such surplus water at a rate equal to two times the sum of the charges which would be applicable under the Water Services Contract. Except as described in this paragraph, Virginia Beach is not entitled to receive any water under the terms of the Water Services Contract after the effective date of termination of the Water Services Contract.

If Virginia Beach receives water from Norfolk which is not provided for under the terms of the Water Services Contract or another written contract between the parties, Virginia Beach must pay for all such water received at a rate equal to three times the sum of the charges which would be applicable under the Water Services Contract.

In the event that the Water Services Contract was terminated by Norfolk prior to the date that Virginia Beach received services under the Water Services Contract and prior to the date Virginia Beach authorized the construction of the Plant Hydraulic Improvements, Virginia Beach was obligated to make certain payments to Norfolk as if Virginia Beach had terminated the Water Services Contract. In the event that the Water Services Contract was terminated by Norfolk prior to the date that Virginia Beach received services under the Water Services Contract and after the date Virginia Beach authorized the construction of the Plant Hydraulic Improvements, Virginia Beach was obligated to make certain other payments to Norfolk as if Virginia Beach had terminated the Water Services Contract. In the event that the Water Services Contract was terminated by Norfolk, after the date that Virginia Beach received services under the Water Services Contract, or by Virginia Beach, Virginia Beach was obligated to pay to Norfolk an amount equal to the rate base allocated to Virginia Beach under the most recent cost of service study, provided such facilities are not necessary for Norfolk to provide service to Norfolk or customers of Norfolk with contracts for the sale of water, including Virginia Beach.

Termination by Virginia Beach.

Virginia Beach had the option to terminate the Water Services Contract at any time prior to authorizing construction of the Plant Hydraulic Improvements by providing written notice. Virginia Beach also had the option to terminate the Water Services Contract at any time after notifying Norfolk to proceed with the Plant Hydraulic Improvements and prior to receiving services pursuant to the Water Services Contract, if Virginia Beach believes that the Gaston pipeline will not become fully operational.

The preceding termination rights have expired due to the commencement of construction of the Plant Hydraulic Improvements and the completion of the Gaston pipeline. Except as otherwise provided in the preceding paragraph, Virginia Beach may terminate the Water Services Contract if one of the following events occurs:

(a) Norfolk has a permanent and total loss of ability to wheel and treat Gaston water for 24 consecutive months.

(b) Norfolk willfully and continuously breaches any term of the Water Services Contract which significantly affects the operation of the Water Services Contract.

(c) Virginia Beach has a total and permanent loss of ability to deliver Gaston water to Norfolk, including, but not limited, equipment failure or destruction, or the loss of any required permit, approval or authority. Such loss is deemed permanent if it continues for 24 consecutive months.

Upon the effective date of termination by Virginia Beach other than for events specified in subparagraph (c) above, Virginia Beach has no further obligations or responsibilities to Norfolk under the Water Services Contract except to pay any outstanding amounts due for service provided under the Water Services Contract.

UNITED STATES DEPARTMENT OF THE NAVY

Since 1995, the City's contract with the Navy, originally entered into in 1981, provides for a 30-day term, which may be cancelled by either party upon 15 days' notice prior to the expiration of any term. Sales to the Navy averaged 4.55 mgd for Fiscal Year 2017, which represents approximately 8.46% of the total metered water consumption of the Water System.

Rates and Charges.

By City ordinance, the City provides water to military users (like the Navy) at a rate equal to the City's retail rate plus 10%, which currently is $5.43/Ccf. The ordinance provides that the rates charged to military users increase by 3.5% each year, just as retail rates do. The Navy paid rates ranging from $3.04/Ccf to $5.43/Ccf Fiscal Years 2004 through 2018 for treated water delivered to the point of delivery as contained in the Water Services Specifications (as defined in the contract) during the term of the contract.

The rates set forth above are the amended rates applied to the actual amount of water delivered to the points of delivery. Because the payment for services is now based on the established retail rate, there will be no future adjustments to the rate based on a true-up cost of service study.

Previously, the contract required a biennial true-up of rates. The Defense Contract Audit Agency ("DCAA") completed the Fiscal Year 2002/Fiscal Year 2003 True–Up in March 2006. The water charge for the Fiscal Year 2002/Fiscal Year 2003 True-Up period was $3.9 million. In May 2007, the City of Norfolk offered a settlement amount of $1.9 million. The Navy had requested that the City apply the 2004 fixed rates and had claimed that $3,500,000 be rebated as a result of the application of the 2004 rates. The City reviewed the claim of the Navy and believed that the claim was without merit. On March 12, 2008, an agreement was reached and the Navy accepted the City's $1.9 million settlement.

Disputes Clause.

The contract is subject to the Contract Disputes Act of 1978 (the "Disputes Act"). Except as provided in the Disputes Act, all disputes arising out of the contract shall be resolved as specified in the contract. The Contracting Officer's decision will be final unless appealed by the City or a suit is filed by the City as provided in the Disputes Act.

In the event of a disagreement, the City shall continue to provide water service and the Navy shall continue to pay the City at the then existing rate. After a determination of the final rates, the Navy shall promptly pay from that point forward such rates that are determined to be just and reasonable.

CITY OF PORTSMOUTH, VIRGINIA

In October 2002, the City entered into a contract with Portsmouth for sale of emergency raw water. The Contract was amended in September 2007 and again in November 2008, in each case to increase the rates paid by Portsmouth under the Contract. Portsmouth has constructed and tested the necessary improvements to convey raw water to its reservoirs.

Delivery Point, Plan, Construction and Operation.

Portsmouth financed, designed, constructed and operates the Raw Water Delivery System pursuant to the Contract. In September 2004, the City provided Portsmouth written approval and acceptance of the Raw Water Delivery System after assurance was received that the improvements provide proper and safe integration with the City's Water System. According to the contract, the City shall endeavor to deliver and sell to Portsmouth up to 10 mgd of temporary surplus raw water.

Delivery and Sale of Temporary Surplus Raw Water.

Following the Portsmouth Start-up Date, the City shall endeavor to deliver and sell to Portsmouth up to 10 mgd of Temporary Surplus Raw Water. Temporary Surplus Raw Water means the difference between the Safe Yield of the City's Water System after adjusting for losses, and the total of (i) the amount of raw water required to supply the persons and entities in the City with treated water, (ii) the amount of raw water required to supply raw and treated water to the City's United States government customers and (iii) the amount of raw water required to supply raw and treated water to the City's other existing and future customers under fixed term contracts.

Water Rates and Charges.

The rate of the Temporary Surplus Raw Water sold pursuant to the contract in Fiscal Year 2018 is $1.29 per thousand gallons of Temporary Surplus Raw Water delivered to the Delivery Point, subject on July 1 of each year to an adjustment based on the CPI Adjustment Factor; provided, however, in no event shall the rate decrease from the previous Fiscal Year.

Term of Contract.

The contract shall continue to be in effect until either party, on 10 days' written notice, terminates the contract.

CITY OF CHESAPEAKE, VIRGINIA

In December 2002, the City entered in to a raw water sales contract with Chesapeake for the sale of surplus raw water. The contract specifies the terms and conditions of the sale of raw water, rates, termination provisions and dispute resolution. Raw water sales to Chesapeake averaged 7.06 mgd in Fiscal Year 2017 which represents approximately 11.8% of the Water System's total metered water consumption.

Term of Contract.

The contract is for a term beginning January 1, 2003, and ending December 31, 2042. Pursuant to the contract, the City began service to Chesapeake as of July 1, 2006 (the "Chesapeake Start-up Date").

Delivery and Sale of Surplus Raw Water.

Upon and following the Chesapeake Start-up Date, the City agrees to sell and deliver to Chesapeake and Chesapeake agrees to accept the Target Amount transmitted to the extent practical at a uniform flow rate. The initial Target Amount shall be seven mgd.

In the event that the metered amount of Surplus Raw Water delivered in a Billing Month is less than the Target Amount multiplied by the number of days in the Billing Month (the difference being a "Shortfall"), Chesapeake may request, in addition to the Target Amount, that an amount up to such Shortfall be delivered in subsequent Billing Months.

Chesapeake may request to temporarily or permanently increase the Target Amount. If the City determines that it can satisfy such request, the City at its sole discretion, may agree to increase the Target Amount accordingly. Chesapeake may request to temporarily decrease the Target Amount and, upon agreement by the City, the Target Amount shall be decreased.

Water Rates and Charges.

The initial Water Rate was ninety-five cents ($0.95) per thousand gallons of Surplus Raw Water sold, which rate was effective through June 30, 2003. Beginning on July 1, 2003, and upon each July 1 thereafter, the Water Rate is adjusted by multiplying the Water Rate by the greater of (i) the CPI Adjustment Factor or (ii) 100%. In no event shall the Water Rate decrease.

Chesapeake shall make monthly payments for the metered amount of Surplus Raw Water delivered. Chesapeake's monthly payment shall equal the Target Amount, which is seven mgd, multiplied by the number of days in the Billing Month unless, (i) Chesapeake and Norfolk have agreed to decrease the Target Amount, in which case such decreased Target Amount shall be used in such calculation; (ii) the average daily flow for a billing month exceeds 0.75 mgd over the sum of the Target Amount plus the average daily volume of Shortfall, in which case Chesapeake's monthly payment for such month shall equal the sum of the Target Amount, plus the average daily volume of Shortfall delivered, plus 0.75 mgd multiplied by the number of days in that Billing Month; and (iii) the amount of Shortfall delivered in any Billing Month shall be included in the total volume of Surplus Raw Water delivered for the calculation of that Billing Month's monthly payment; provided, however, that the Water Rate charged for any amount of delivered Shortfall shall be the Water Rate in effect for the Billing Month during which such Shortfall was initially determined.

Reductions and Curtailments.

The City may reduce the Target Amount of Surplus Raw Water delivered to Chesapeake only if one or more of the following conditions occur:

(i) decrease in Surplus Water Supply;

(ii) facility or equipment failure;

(iii) drought;

(iv) contamination; and

(v) force majeure.

Termination by the City.

The City may terminate the contract if one or more of the following events of default occurs: (i) Chesapeake does not pay in full within 60 days from the date of receipt of an invoice, (ii) Chesapeake has willfully breached the terms of the contract which significantly affects the operation of the contract, or (iii) construction of the Raw Water Delivery System is not fully complete within five years of the established Start-up date of July 1, 2006.

Termination by Chesapeake.

Chesapeake may terminate the contract if: (i) the City has willfully breached any term of the contract which significantly affects the operation of the contract or (ii) the City delivers less than the difference of the Target Amount minus 0.75 mgd for more than six consecutive Billing Months.

Pre-existing Surplus Treated Water Purchase Arrangement.

Chesapeake has been purchasing surplus treated water from the City for over 30 years. No term of the raw water contract shall reduce or waive either party's rights or obligations regarding the City's sale to Chesapeake of surplus treated water. As part of the raw water contract, the City agrees to continue selling and Chesapeake agrees to continue purchasing no less than two mgd of surplus treated water as long as the raw water sales contract is effective.

WESTERN TIDEWATER WATER AUTHORITY

In September 2009, the City entered into a raw water sales contract with the Western Tidewater Water Authority ("WTWA") and Suffolk and Isle of Wight, the members of WTWA, for the sale of available surplus raw water supply to WTWA. The contract specifies the terms and conditions of the sale of raw water, rates, termination provisions and dispute resolution.

The contract is a "take or pay" contract, requiring the City to make available the Contract Amounts, which are the Average Day Amounts, the Maximum Month Amounts and the Maximum Day Amounts specified in the contract, and WTWA to pay for those Contract Amounts, regardless of actual consumption.

Term of Contract.

The contract is for a term beginning September 29, 2009, and ending June 30, 2048. Pursuant to the contract, the City made service available to WTWA in the spring of 2014 (the "WTWA Start-up Date").

Delivery and Sale of Surplus Raw Water.

The City agrees to sell and deliver to WTWA and WTWA agrees to purchase water in accordance with the Contract Amounts set forth in the contract. WTWA shall not be obligated to take delivery of the entire Contract Amounts.

Should WTWA request delivery of water in excess of the Maximum Day, Maximum Month and/or Average Day Amounts, other than water for a WTWA Emergency, at the City's sole discretion, the Contract Amounts may be adjusted to meet the request. At the end of any Fiscal Year during which Contract Amounts have been adjusted, the City may, in its sole discretion, determine that the Contract Amounts will remain at such increased amounts for the following Fiscal Year or revert to the Contract Amounts set forth in the contract. In no event shall the Contract Amounts exceed the highest Contract Amount set forth in the contract.

WTWA may request permanent acceleration of the Contract Amounts. The City is required to comply with such request unless (i) water is unavailable due to a temporary water sales contract in effect, (ii) the facilities and/or water resources necessary to provide additional water cannot be made available, or (iii) the Contract Amounts have been reduced due to reduction in the City's Safe Yield under the contract.

WTWA may request raw water to meet a bona fide WTWA Emergency. If the City determines that additional water is available, taking into consideration the City's other existing demands, the City may, in its sole discretion, deliver the water to WTWA. The supply of water to meet a WTWA Emergency shall not be used to determine whether Contract Amounts have been exceeded or to reduce the Reservation Amount or Reservation Fee set forth in the contract.

Water Rates and Charges.

Water Rates. The initial Water Rate was one dollar and eleven cents ($1.11) per thousand gallons, which rate was effective through July 1, 2009. Beginning on July 1, 2009, and upon each July 1 thereafter, the Water Rate is adjusted by multiplying the Water Rate by the CPI Adjustment Factor. In no event shall the Water Rate decrease from the previous Fiscal Year.

For the period from July 1, 2008 until the WTWA Start-Up Date, WTWA shall pay the City the Monthly Water Payment Amount without regard to whether water is available to be delivered. On and after the WTWA Start-Up Date, WTWA shall pay Norfolk the Monthly Water Payment Amount, subject to certain adjustments provided for in the contract.

Reservation Fee. Pursuant to the contract, WTWA shall pay a Monthly Reservation Fee. The Monthly Reservation Fee shall be calculated by multiplying the Reservation Amount set forth in the contract by the percentages specified in the contract. For the period from January 1, 2011 through the WTWA Start-Up Date, the percentage used to calculate the Monthly Reservation Fee is 20% and thereafter it is 25%.

Plan, Construction and Operations.

The Raw Water Delivery System is broken into the WTWA Portion of Plan and the Norfolk Portion of Plan. Both WTWA and the City are responsible for the planning, bidding, construction and testing of their respective portions of the Raw Water Delivery System in accordance with the construction protocol set forth in the contract.

The City shall be under no obligation to deliver water to WTWA by the WTWA Start-Up Date and WTWA shall be under no obligation to pay any amounts that would be required after the WTWA Start-Up Date if the Raw Water Delivery System cannot be completed by such date due to the failure of the other party to timely (i) design, bid and/or construct its respective Portion of the Plan, (ii) review the design, bids and/or contracts for the other party's Portion of the Plan, (iii) test the Raw Water Delivery System, (iv) make modifications for failure of the Raw Water Delivery System to conform to the Plan or necessitated by adverse impacts to the Water System shown after testing. Additionally, the City shall be under no obligation to deliver water to WTWA by the WTWA Start-Up Date if WTWA fails to reimburse the City for the City's Capital Costs as provided in the contract.

Following construction of the Raw Water Delivery System, each party is solely responsible for the operation and maintenance of its respective Portion of Plan.

Reductions and Curtailments.

The City's obligation to provide the full Contract Amounts shall be excused, either partially or wholly, only if one or more of the following conditions occur:

(i) decrease in the amount of Surplus Raw Water available;

(ii) facility or equipment failure;

(iii) drought; and

(iv) force majeure.

Upon WTWA's request, the City may in its sole discretion make up the delivery shortfall (or a portion thereof) by delivering additional water. If the City does not deliver additional water, WTWA shall be entitled to a credit for such delivery shortfall at the end of the applicable Fiscal Year.

Termination by the City.

The City may terminate the contract if: (i) WTWA does not pay in full within 60 days from the date of a receipt of an invoice, or (ii) WTWA, Suffolk or Isle of Wight has breached any other term of the contract.

Termination by WTWA.

WTWA may terminate the contract if: (i) the City does not deliver water in the amounts requested and when requested by WTWA as provided in the contract except as excused under the contract and in the event of a minor variance managed in accordance with the contract, or (ii) the City has breached any other term of the contract.

Guarantee by Suffolk and Isle of Wight.

In consideration of the City agreeing to the terms of the contract, Suffolk and Isle of Wight guarantee the payment obligations of WTWA under the contract, to the extent permitted by law provided that such guarantee is not deemed to be debt pursuant to the Constitution of Virginia. The guarantee is initially apportioned 75% to Suffolk and 25% to Isle of Wight. The apportionment may be adjusted by Suffolk and Isle of Wight upon joint notice to the City of such reapportionment.

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FORM OF CONTINUING DISCLOSURE AGREEMENT

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CONTINUING DISCLOSURE AGREEMENT

This Continuing Disclosure Agreement (the "Disclosure Agreement") is executed and delivered as of March 27, 2018 (the "Closing Date"), by the City of Norfolk, Virginia (the "City"), in connection with the issuance by the City of its $26,700,000 Water Revenue Bonds, Series 2018 (the "2018 Bonds") pursuant to Ordinance No. 47,117 enacted by the City Council of the City on January 23, 2018 (the "Ordinance"), and pursuant to a Master Indenture of Trust dated as of November 1, 1993, as previously supplemented and amended (the "Master Indenture"), between the City and U.S. Bank National Association as successor trustee (the "Trustee"), and as further supplemented by a Thirteenth Supplemental Indenture of Trust dated as of March 1, 2018, between the City and the Trustee (collectively, the "Indenture").

The proceeds of the 2018 Bonds are being used by the City, together with other available funds, (i) to finance certain costs of acquiring, constructing and equipping capital improvements to the City's water system and (ii) to pay certain costs of issuance of the 2018 Bonds. Pursuant to the Ordinance, the City approved the offering and sale of the 2018 Bonds to the public pursuant to an Official Statement relating to the 2018 Bonds, dated March 13, 2018 (the "Official Statement"). The City has determined that it constitutes an "obligated person" within the meaning of the Rule, as hereinafter defined, with respect to the 2018 Bonds and, accordingly, hereby represents, covenants and agrees as follows:

Section 1. **<u>Purpose of the Disclosure Agreement; Representation</u>**. This Disclosure Agreement is being executed and delivered by the City for the benefit of the Holders, as hereinafter defined, and in order to assist the Participating Underwriters, as hereinafter defined, in complying with the Rule. The City acknowledges that it is undertaking primary responsibility for any reports, notices or disclosures that may be required under this Disclosure Agreement.

Section 2. **<u>Definitions</u>**. In addition to the definitions set forth elsewhere in this Disclosure Agreement, the following capitalized terms shall have the following meanings:

"Annual Financial Information" with respect to any Fiscal Year of the City means the following:

> (i) the financial statements (consisting of at least a statement of net assets, a statement of cash flows and a statement of revenues, expenses and changes in fund net assets and thereafter a statement of net assets, a statement of cash flows and a statement of revenues, expenses and changes in fund net assets) of the City's Water Utility Fund, which (A) are prepared annually in accordance with generally accepted accounting principles in effect from time to time consistently applied (<u>provided</u> that nothing in this Disclosure Agreement will prohibit the City after the date of the Official Statement from changing such principles so as to comply with generally accepted accounting principles as then in effect or to comply with a change in applicable Virginia law); <u>and</u> (B) are audited by an independent certified public accountant or firm of such accountants in accordance with generally accepted auditing standards as in effect from time to time; and

(ii) updates of the operating data contained in the following sections and subsections of the Official Statement entitled: (a) "THE SYSTEM" -- "Customer Base" (but only with respect to Table 1, Average Daily Metered Consumption); and (b) "FINANCIAL MANAGEMENT" -- "Water Rates" (but only with respect to Table 10, Retail Customers' Average Annual Costs Norfolk Retail, Table 11, Wholesale Customers' Average Annual Costs Virginia Beach, Table 12, Wholesale Customers' Average Annual Costs U.S. Navy, including Norfolk and Virginia Beach Facilities and Table 13, Wholesale Customers' Average Annual Costs Chesapeake) and "Budget Process" (but only with respect to Table 16, Water Utility Fund Annual Budget for the two most recent Fiscal Years). All of the operating data to be provided pursuant to this subparagraph may be presented in the form of tables.

"Dissemination Agent" shall mean the City, acting in its capacity as Dissemination Agent hereunder, or any successor Dissemination Agent designated in writing by the City and which has filed with the City a written acceptance of such designation.

"Fiscal Year" shall mean the twelve-month period, at the end of which the financial position of the City and the results of its operations for such period are determined. Currently, the City's Fiscal Year begins July 1 and continues through June 30 of the next year.

"Holder" shall mean, for purposes of this Disclosure Agreement, any person who is a record owner or beneficial owner of a 2018 Bond.

"Make Public" or "Made Public" has the meaning set forth in Section 4 of this Disclosure Agreement.

"MSRB" shall mean the Municipal Securities Rulemaking Board.

"Participating Underwriter" shall mean any of the original underwriters of the 2018 Bonds required to comply with the Rule in connection with the offering of such 2018 Bonds.

"Rule" shall mean Rule 15c2-12 under the Securities Exchange Act of 1934 and any similar rules of the SEC relating to disclosure requirements in the offering and sale of municipal securities, all as in effect from time to time.

"SEC" shall mean the U.S. Securities and Exchange Commission.

Section 3. **Obligations of the City**. (a) The City shall Make Public or cause to be Made Public by the Dissemination Agent (if other than the City) the Annual Financial Information with respect to any Fiscal Year of the City not later than March 31 after the end of such Fiscal Year.

(b) The City shall Make Public or cause to be Made Public by the Dissemination Agent (if other than the City), in a timely manner not in excess of ten business days after the occurrence of the event, notice of the occurrence of any of the following events with respect to the 2018 Bonds:

(i) principal and interest payment delinquencies;

(ii) non-payment related defaults, if material;

(iii) unscheduled draws on debt service reserves reflecting financial difficulties;

(iv) unscheduled draws on any credit enhancement maintained with respect to the 2018 Bonds reflecting financial difficulties;

(v) substitution of credit or liquidity providers, or their failure to perform;

(vi) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701 - TEB) or other material notices or determinations with respect to the tax status of the 2018 Bonds, or other material events affecting the tax status of the 2018 Bonds;

(vii) modifications to rights of Holders, if material;

(viii) bond calls, if material, and tender offers;

(ix) defeasances;

(x) release, substitution, or sale of property securing repayment of the 2018 Bonds, if material;

(xi) rating changes;

(xii) bankruptcy, insolvency, receivership or similar event of the City;

(xiii) the consummation of a merger, consolidation, or acquisition involving the City or the sale of all or substantially all of the assets of the City, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material; and

(xiv) appointment of a successor or additional trustee or the change of name of a trustee, if material.

Provided that nothing in this subsection (b) shall require the City to maintain any debt service reserve, credit enhancement or credit or liquidity providers with respect to the 2018 Bonds or to pledge any property as security for repayment of the 2018 Bonds.

(c) The City shall Make Public or cause to be Made Public by the Dissemination Agent (if other than the City), in a timely manner, notice of a failure of the City to provide the Annual Financial Information, on or before the date specified in this Disclosure Agreement.

(d) The City shall notify the MSRB of any change in its Fiscal Year not later than the date on which it first provides any information to the MSRB in the current Fiscal Year.

Section 4. **Information Made Public**. Information shall be deemed to have been "Made Public" for purposes of this Disclosure Agreement if transmitted the MSRB in an electronic format as prescribed by the MSRB. Should the SEC approve any additional or subsequent filing system for satisfying the continuing disclosure filing requirements of the Rule, any filings required under this Disclosure Agreement may be made by transmitting such filing to such system, as described in the applicable SEC regulation or release approving such filing system.

Section 5. **Incorporation by Reference**. Any or all of the Annual Financial Information may be incorporated by specific reference from other documents, including official statements containing information with respect to the City, which are available to the public on the internet website of the MSRB or filed with the SEC. The City shall clearly identify each such other document so incorporated by reference.

Section 6. **Termination of Reporting Obligation**. The obligations of the City under this Disclosure Agreement with respect to any 2018 Bond shall terminate upon the earlier to occur of the legal defeasance or final retirement of such 2018 Bond.

Section 7. **Dissemination Agent**. The City may, from time to time, appoint or engage a Dissemination Agent to assist it in carrying out its obligations under this Disclosure Agreement and may discharge any such Agent, with or without appointing a successor Dissemination Agent. If at any time there is not any other designated Dissemination Agent, the City shall be the Dissemination Agent.

Section 8. **Identifying Information**. All documents provided to the MSRB hereunder shall be accompanied by identifying information as prescribed by the MSRB.

Section 9. **Amendment**. Notwithstanding any other provision of this Disclosure Agreement, the City may amend this Disclosure Agreement, if upon such amendment this Disclosure Agreement satisfies the requirements of the Rule at the time of amendment. The City shall provide a copy of each amendment to the MSRB in a timely manner, not in excess of ten business days, from the effective date of the amendment.

Section 10. **Additional Information**. Nothing in this Disclosure Agreement shall be deemed to prevent the City from disseminating any other information using the means of dissemination set forth in this Disclosure Agreement or any other means of communication, or including any other information in any Annual Financial Information or notice of occurrence of an event listed in Section 3(c), in addition to that which is required by this Disclosure Agreement. If the City chooses to report any information in any Annual Financial Information or include any information in a notice of occurrence of an event listed in Section 3(c), in addition to that which is specifically required by this Disclosure Agreement, the City shall have no obligation under this Disclosure Agreement to update such information or include it in any future Annual Financial Information or notice of occurrence of such an event.

Section 11. **Default**. Any Holder, whether acting jointly or severally, may take such action as may be permitted by law against the appropriate public official to secure compliance with the obligations of the City under this Disclosure Agreement. In addition, any Holder, whether acting jointly or severally, may take such action as may be permitted by law to challenge the adequacy of any information provided pursuant to this Disclosure Agreement, or to enforce any other obligation of the City hereunder. A default under this Disclosure Agreement shall not be deemed an event of default under the Ordinance or any other debt authorization of the City, the Indenture or any 2018 Bond and the sole remedy under this Disclosure Agreement in the event of any failure of the City to comply herewith shall be an action to compel performance. Nothing in this provision shall be deemed to restrict the rights or remedies of any Holder pursuant to the Securities Exchange Act of 1934, the rules and regulations promulgated thereunder, or other applicable laws.

Section 12. **Beneficiaries**. This Disclosure Agreement shall inure solely to the benefit of the City, the Participating Underwriters and the Holders and shall create no rights in any other person or entity.

Section 13. **Counterparts**. This Disclosure Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

[Signature Page Follows]

IN WITNESS WHEREOF, the undersigned have executed this Continuing Disclosure Agreement on behalf of the City of Norfolk, Virginia, as of the Closing Date.

CITY OF NORFOLK, VIRGINIA

By: ______________________________
Douglas L. Smith, City Manager

By: ______________________________
Christine Garczynski, Director of Finance

Approved as to Form and Correctness:

____
Office of the City Attorney
City of Norfolk, Virginia

[Signature Page to Continuing Disclosure Agreement]

APPENDIX G

BOOK-ENTRY ONLY SYSTEM

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The description which follows of the procedures and recordkeeping with respect to beneficial ownership interests in the 2018 Bonds, payments of principal of and interest on the bonds to DTC, its nominee, Direct Participants, as hereinafter defined, or Beneficial Owners, as hereinafter defined,, confirmation and transfer of beneficial ownership interests in the bonds and other bond-related transactions by and between DTC, the Direct Participants and Beneficial Owners is based solely on information furnished by DTC.

DTC will act as securities depository for the 2018 Bonds. The 2018 Bonds will be issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee), or such other name as may be requested by an authorized representative of DTC. One fully-registered bond certificate will be issued for each maturity of the 2018 Bonds in the aggregate principal amount of such issue and will be deposited with DTC.

DTC, the world's largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly (the "Indirect Participants"). DTC has Standard & Poor's rating of AA+. The DTC Rules applicable to its Direct Participants and Indirect Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

Purchases of the 2018 Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the 2018 Bonds on DTC's records. The ownership interest of each actual purchaser of the 2018 Bonds (the "Beneficial Owner") is in turn to be recorded on the records of Direct Participants and Indirect Participants, as applicable. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct Participant or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the 2018 Bonds are to be accomplished by entries made on the books of Direct Participants and Indirect Participants acting on behalf of the Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in the 2018 Bonds, except in the event that use of the book-entry system for the 2018 Bonds is discontinued.

To facilitate subsequent transfers, the 2018 Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of the 2018 Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the 2018 Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts the 2018 Bonds are credited, which may or may not be the Beneficial Owners. The Direct Participants and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of the 2018 Bonds may wish to take certain steps to augment transmission to them of notices of significant events with respect to the 2018 Bonds, such as redemptions, tenders, defaults and proposed amendments to the security documents. For example, Beneficial Owners of the 2018 Bonds may wish to ascertain that the nominee holding the 2018 Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of notices be provided directly to them.

Redemption notices shall be sent to DTC. If less than all of the 2018 Bonds within an issue are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the 2018 Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an omnibus proxy (the "Omnibus Proxy") to the City as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the 2018 Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Redemption proceeds, distributions, and dividend payments on the 2018 Bonds will be made to Cede & Co. or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the bond registrar or paying agent on the payable date in accordance with their respective holdings shown on DTC's records. Payments by Direct Participants and Indirect Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Direct Participant or Indirect Participant and not of DTC (or its nominee), the City or the bond registrar and paying agent, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, distributions, and dividend payments to Cede & Co (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the bond registrar and paying agent, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct Participants and Indirect Participants.

DTC may discontinue providing its services as depository with respect to the 2018 Bonds at any time by giving reasonable notice to the City and the bond registrar and paying agent. Under such circumstances, in the event that a successor depository is not obtained, the 2018 Bonds are required to be printed and delivered.

The City may decide to discontinue use of the system of book-entry transfers through DTC (or a successor securities depository). In that event, certificates for the 2018 Bonds will be printed and delivered to DTC.

Neither the City nor the bond registrar and paying agent has any responsibility or obligation to the Direct Participants or Indirect Participants or the Beneficial Owners with respect to (a) the accuracy of any records maintained by DTC or any Direct Participant or Indirect Participant; (b) the payment by any Direct Participant or Indirect Participant of any amount due to any Beneficial Owner in respect of the principal of and interest on the 2018 Bonds; (c) the delivery or timeliness of delivery by any Direct Participant or Indirect Participant of any notice to any Beneficial Owner that is required or permitted to be given to Holders; or (d) any other action taken by DTC, or its nominee, Cede & Co., as Holder, including the effectiveness of any action taken pursuant to an Omnibus Proxy.

So long as Cede & Co. is the registered owner of the 2018 Bonds, as nominee of DTC, references in this Official Statement to the Holders of the 2018 Bonds mean Cede & Co. and not the Beneficial Owners, and Cede & Co. will be treated as the only holders of the 2018 Bonds.

The City may enter into amendments to the agreement with DTC or successor agreements with a successor securities depository, relating to the book-entry system to be maintained with respect to the 2018 Bonds without the consent of Beneficial Owners or Holders.

The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that the City believes to be reliable, but the City takes no responsibility for the accuracy thereof.

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