Dinwiddie County Water Authority

A Component Unit of Dinwiddie County, Virginia

Financial Statements

Years Ended June 30, 2018 and 2017

DIXON HUGHES GOODMAN LLP

BOARD OF DIRECTORS

Norman C. Olgers, Jr, Chairman

F. Edward Pearson, II, Vice-Chairman

Gene R. Witt., Secretary and Treasurer

David E. Blaha

Robert Perkins

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DIXON HUGHES GOODMAN LLP

Independent Auditors' Report

Board of Directors
Dinwiddie County Water Authority
Dinwiddie, Virginia

We have audited the accompanying financial statements of the business-type activities of the Dinwiddie County Water Authority, a component unit of Dinwiddie County, Virginia, as of and for the years ended June 30, 2018 and 2017, and the related notes to the financial statements, which collectively comprise the Dinwiddie County Water Authority's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; *Specifications for Audits of Authorities, Boards and Commissions*, issued by the Auditor of Public Accounts of the Commonwealth of Virginia; and the *U.S. Department of Agriculture Rural Development Water and Waste Program Audit Guide*, issued by the Office of Inspector General. Those standards, specifications and the Guide require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the business-type activities of the Dinwiddie County Water Authority as of June 30, 2018 and 2017, and the changes in financial position and cash flows thereof for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Change in Accounting Principle
As discussed in Note 3 to the financial statements, during 2018 Dinwiddie County Water Authority implemented GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions,* which resulted in a cumulative effect adjustment to net position as of the beginning of the year. Our opinion is not modified with respect to this matter.

Other Matters
Required Supplementary Information
Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 3 - 6 and schedule of changes in net pension and other postemployment benefit (OPEB) liabilities and related ratios and schedule of contributions on pages 35 - 38 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Government Auditing 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 and disclosing pension and OPEB activities. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits of the 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 Information
Our audits were conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Dinwiddie County Water Authority's basic financial statements. The accompanying financial information, listed as supplementary information in the table of contents, is presented for purposes of additional analysis and is not a required part of the basic financial statements.

The combining statements and schedules 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 financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated, in all material respects in relation to the basic financial statements taken as a whole.

Other Reporting Required by Government Auditing Standards
In accordance with *Government Auditing Standards*, we have also issued our report dated October 9, 2018, on our consideration of Dinwiddie County Water Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Dinwiddie County Water Authority's internal control over financial reporting and compliance.

Dixon Hughes Goodman LLP

Chesterfield, Virginia
October 9, 2018

Management's Discussion and Analysis

As management of the Dinwiddie County Water Authority, we offer readers of the Dinwiddie County Water Authority's financial statements this narrative overview and analysis of the financial activities of Dinwiddie County Water Authority for the fiscal years ended June 30, 2018 and 2017.

Summary of Dinwiddie County Water Authority Operations

The Dinwiddie County Water Authority (DCWA or the Authority) staff consists of 12 employees including the executive director, and 2 part-time employees. DCWA maintains two water distribution pump stations, 25 wastewater pump stations, 5 elevated water tanks (4 on DCWA and 1 in McKenney), one well system (Lew Jones - approximately 26 customers), one wastewater treatment plant, approximately 81 miles of water lines, and approximately 65 miles of wastewater collection lines.

Water is purchased from the Appomattox River Water Authority (ARWA) and distributed to the Authority's customers through the Main Water Pump Station on Ferndale Avenue (across from the Ferndale Park) and Booster Water Pump Station located on Central State's property on the north side of Boydton Plank Road then through the Authority's pipe network. The Lew Jones subdivision is served by a community well. Water service is also provided to a few customers adjacent to the County of Prince George by the County of Prince George and near the Town of McKenney by the Town of McKenney.

Wastewater service in the north end of the Dinwiddie County is collected in the Authority's gravity collection system and various wastewater pump stations and sent through two metering stations, one on Piney Beach and one near the City of Petersburg along Rohoic Creek. The Authority pays the City of Petersburg for the right to "transport" wastewater through their collection system to the South Central Wastewater Authority (SCWWA). The Authority then pays SCWWA to treat the wastewater.

Wastewater service to the Courthouse area is provided by a small collection system around the Courthouse area. Wastewater is also collected by various pump stations from the Route 85 rest stops, Dinwiddie Junior High School, Dinwiddie High School, Dinwiddie Fire Department, and twenty five (25) residential and commercial connections. In the Courthouse area itself, there are some additional pump stations that serve the Pamplin building and elementary school. The wastewater collected is then sent to the Authority's Courthouse Wastewater Treatment Plant for treatment and discharge to Stony Creek.

Financial Highlights

- Selected financial information for 2018, 2017, and 2016 is as follows:

	2018	2017	2016
Total capital assets	**$ 18,244,531**	$ 17,259,670	$ 18,145,359
Total assets and deferred outflows of resources	**$ 28,479,463**	$ 27,065,455	$ 27,374,582
Total long-term liabilities	**$ 4,722,000**	$ 5,279,426	$ 6,146,967
Total liabilities and deferred inflows of resources	**$ 5,868,304**	$ 6,353,644	$ 7,078,173
Total operating revenues	**$ 3,707,850**	$ 3,559,535	$ 3,306,057
Total operating expenses, excluding depreciation	**$ 2,770,868**	$ 2,772,523	$ 2,643,391
Change in net position	**$ 91,856**	$ 415,402	$ (26,262)
Net position:			
Net investment in capital assets	**$ 12,992,639**	$ 11,427,856	$ 15,260,011
Restricted	**342,411**	498,903	414,936
Unrestricted	**9,276,109**	8,785,052	4,621,462
Total net position, end of year	**$ 22,611,159**	$ 20,711,811	$ 20,296,409

- Operating revenues increased from fiscal year 2017 to fiscal year 2018 by $148,315 or approximately 4%. The FY18 revenue increased as a result of the implementation of the third year of a three year rate increase that took effect in August 2015. The rate increase projected a 4% increase on residential customers and slightly more on commercial and industrial customers.
- Contributions from the County for FY18 decreased by $493,235 which is approximately 71% below FY17. The main factor for the decreased contributions from the County from FY17 to FY18 was FY17 included a capital contribution to repaint the McKenney Tank. There were no capital contributions from the County for FY18. Furthermore, with the third year approved rate increase, the contributions from the County for Fund 80 - the Church Road System were reduced to zero. This means that Fund 80 is being funded by the revenues collected for that service area.
- The Authority's activities are divided into three operating funds; Fund 10 - the Operating (Main System) Fund, Fund 20 - the Courthouse Fund, and Fund 80 - the Church Road Fund. Total operating expenses excluding depreciation are $1,655 or approximately 0% lower in fiscal year 2018 than fiscal year 2017.
- The Courthouse Fund operating expenses, excluding depreciation, increased by $18,085 or approximately 6% from FY17. This increase is attributed to some unexpected electrical work that included replacing and rewiring the operating screen for the automated treatment process and wiring the heat tracing for the relocated check valves.
- The Church Road System Fund, Fund 80, realized a $26,026 or approximately 10% decrease in operating expenses. The majority of this decrease, (8%), is the result of reduced water sales to the steel mill.
- During 2018, the Authority's liabilities decreased by $552,460 or approximately 9%. The reduction is liabilities is the result of continuing to make payments on the Authority's bonds.
- The Authority has agreed by resolution with financial support from Dinwiddie County to participate in the required nutrient improvements for the South Central Wastewater Authority (SCWWA) and the off river storage project for the Appomattox River Water Authority (ARWA). The estimated cost of the nutrient improvements at the South Central Wastewater Authority is $65 million with Dinwiddie County responsible for 10% and the estimated cost of the off river storage is $90 million with Dinwiddie County responsible for 6.75%.

  The Board of Directors for SCWWA has agreed to purchase nutrient credits for nitrogen and phosphorous through 2020. It is anticipated that the nutrient project will be delayed until 2021. The current VPDES permit expires in 2021. The Authority will be responsible for the operating costs of the new system and Dinwiddie County will be responsible for the debt service and interest for their portion, 10%, for construction of the nutrient project. Dinwiddie County has included their portion of the nutrient project in their Capital Improvement Program and is currently budgeting for their portion of the nutrient credit costs on an annual basis. The Authority's portion of these costs is included in the current rate structure.

  The Appomattox River Water Authority (ARWA) is investigating alternative solutions for providing additional capacity and sustainability for Lake Chesdin. The goal for this project is to have an off river storage facility in service by 2060. ARWA is considering other intermediary solutions for additional storage prior to 2060.
- The Authority participated with the developer of the Lake Jordan Subdivision to oversize the water line through the development adjacent to Route 1 from 8" to 16" in FY07. The oversizing cost of the water line is being reimbursed to the developer through reduced water connection fees for the developer per the Authority's Rules and Regulations. This reimbursement is still in effect for FY18. During FY18, there were no connections that met the criteria for developer reimbursement. To date, the subdivision has not been completed.
- The unrestricted cash and cash equivalents decreased by $557,688 or approximately 41% This reduction is in large part due to transferring cash funds from the Operating and Courthouse Fund to the Local Government Investment Pool (LGIP). The LGIP is where long term capital improvement funds are invested in a state run pool with higher returns than CD's and local bank investments.

- The Authority continues to pay off debt service and interest on the existing bonds. This is illustrated by a reduction from FY17 to FY18 in long-term and total liabilities.

Authority Highlights for 2018

- Assisted the Dinwiddie County School Board with the closing of the Southside Elementary School Lagoon. The School Board had a consultant develop a plan and only received one bid. The Authority met with regulatory officials, developed a more appropriate closure plan, provided project management, secured contractors and closed the lagoon at a significant savings to Dinwiddie County. The original bid was $640K. The Authority was successful in closing the lagoon for $115K.
- Invested funds in the Local Government Investment Pool (LGIP) managed by the Commonwealth of Virginia. The investments are funds for long term capital improvement projects. Funds are added to these projects on an annual basis.
- Purchased a F250 construction truck for field staff to tow construction equipment.
- Purchased two diesel standby pumps, one for the Crystal Lane Wastewater Pump Station and the other for the School House Lane Wastewater Pump Station. These pumps provide reliability, redundancy and resiliency for these wastewater pump stations.
- Completed the renewal application for the Rohoic Creek Wastewater Treatment Plant. This is a five year permit. This is the permit for a future wastewater treatment plant to provide 4.5 mgd of wastewater treatment capacity for Dinwiddie County.
- Provided project management and oversight for the installation of water and sewer facilities for the Aldi Distribution Center. Services included design, easement acquisition, general contracting, purchasing, inspection, testing and startup. The Authority only sought reimbursement for out of pocket costs. The Authority provided in-house engineering, project management and inspection at no cost to the County.
- Provided technical support to Dinwiddie County on Appomattox River Water Authority and South Central Wastewater Authority issues.
- Implemented the third year of a planned and approved three (3) year rate increase.
- Added nine new residential water and sewer connections and one new industrial connection. The industrial connection was for the Aldi Distribution Center.
- Funded FY18 budgeted capital improvement projects.
- Began the process with Dinwiddie County to extend the corporate life of the Dinwiddie County Water Authority.
- Relocated the check valves out of the basins at the Courthouse Wastewater Treatment Plant and added insulation and heat tracing.
- Added instrumentation at the Courthouse Wastewater Treatment Plant for additional remote monitoring for pH and dissolved oxygen (DO). The ultimate goal is to reduce staffing on the weekends at the plant.
- Successful FY17 audit.
- Executed a term contract for generator maintenance to extend the useful life of the generators at the water and wastewater pump stations and wastewater treatment plant.

Overview of the Financial Statements

The Authority's basic financial statements are comprised of two components: (1) financial statements and (2) notes to the financial statements. Additionally, supplementary combining information by fund accounts is included.

The financial statements of the Authority offer short and long-term financial information about its activities. The statement of net position provides information about the nature and amounts of the Authority's cash, investments and receivables (assets), and its obligations to creditors (liabilities). All of the Authority's current fiscal year revenues and expenses are accounted for in the statement of revenues, expenses and changes in net position. These statements measure whether the Authority successfully recovered all of its costs through user charges from its customers. The statement of cash flows provides information on the Authority's cash receipts, cash payments, and net changes in cash resulting from operating, investing, capital, and non-capital financial activities. It also provides insight on the source of cash, the use of cash, and cash changes during the reporting period.

Economic Conditions

The Authority continues to operate under sound management. Overall finances for the Authority for fiscal year 2018 as viewed by management, including the Board of Directors, is considered sound.

Dinwiddie County Water Authority
Statements of Net Position
June 30, 2018 and 2017

	2018	2017
ASSETS		
Current assets:		
Cash and cash equivalents	$ 814,707	$ 1,372,395
Accounts receivable, net	549,215	499,778
Due from County	335,958	3,087
Prepaid expenses	40,727	62,722
Total current assets	1,740,607	1,937,982
Restricted assets:		
Cash and cash equivalents	517,210	498,903
Property, plant and equipment, net:	18,244,531	17,259,670
Other assets:		
Cash and cash equivalents, rate stabilization fund	615,383	606,373
Cash and cash equivalents, board designated	3,734,956	3,097,208
Unamortized sewer contract costs	3,363,661	3,550,530
Net pension asset	200,902	-
Total other assets	7,914,902	7,254,111
Total assets	28,417,250	26,950,666
DEFERRED OUTFLOWS OF RESOURCES		
Deferred amount on bond refunding	25,108	32,186
Pension deferrals	34,272	82,603
OPEB deferrals	2,833	-
Total deferred outflows of resources	62,213	114,789
	$ 28,479,463	$ 27,065,455

		2018		2017
LIABILITIES				
Current liabilities:				
Accounts payable and accrued expenses	**$**	**213,828**	$	238,030
Accrued interest payable		**17,216**		19,309
Bonds payable, current portion		**598,000**		587,000
Unearned connection fees		**16,246**		16,246
Total current liabilities		**845,290**		860,585
Current liabilities payable from restricted assets:				
Customer deposits		**175,524**		155,263
Long-term liabilities:				
Bonds payable, less current portion		**4,679,000**		5,277,000
Net OPEB liability		**43,000**		-
Net pension liability		**-**		2,426
Total long-term liabilities		**4,722,000**		5,279,426
Total liabilities		**5,742,814**		6,295,274
DEFERRED INFLOWS OF RESOURCES				
Pension deferrals		**120,490**		58,370
OPEB deferrals		**5,000**		-
Total deferred inflows of resources		**125,490**		58,370
NET POSITION				
Net investment in capital assets		**12,992,639**		11,427,856
Restricted		**342,411**		498,903
Unrestricted		**9,276,109**		8,785,052
Total net position		**22,611,159**		20,711,811
	$	**28,479,463**	$	27,065,455

Dinwiddie County Water Authority
Statements of Revenues, Expenses and Changes in Net Position
Years Ended June 30, 2018 and 2017

	2018	2017
Revenues:		
Operating revenues:		
Sewer charges	$ 1,593,278	$ 1,516,157
Sale of water	1,720,609	1,617,180
County use and operation fees	244,038	239,083
Penalty and service charges	97,550	101,314
Fire hydrant rental	1,198	1,153
Miscellaneous	51,177	84,648
Total operating revenues	3,707,850	3,559,535
Operating expenses, other than depreciation:		
Water, source of supply	524,915	564,737
Water, pumping	42,536	37,275
Water, transmission and distribution	108,430	78,612
Sewage, pumping	161,411	82,446
Sewage, treatment	869,449	874,959
Sewage, transmission and distribution	93,681	85,369
Maintenance shop	125,836	112,906
Customer accounts	277,609	290,903
Administrative	567,001	645,316
Total operating expenses, other than depreciation	2,770,868	2,772,523
Operating income before depreciation	936,982	787,012
Depreciation	(984,784)	(966,931)
Operating loss	(47,802)	(179,919)
Nonoperating revenues (expenses):		
Interest earned	49,163	13,117
Contributions from the County	200,508	693,743
Economic development expenses	(35,561)	-
Loss on disposal of fixed assets	-	(25,731)
Refinancing costs	-	(76,131)
Service and connection fees	53,662	136,662
Interest expense	(128,114)	(146,339)
Total nonoperating revenues	139,658	595,321
Income before contributed capital	91,856	415,402

See accompanying notes.

	2018	2017
Contributed capital, developer paid infrastructure	$ 1,855,492	$ -
Change in net position	1,947,348	415,402
Net position, beginning of year, as previously reported	20,711,811	20,296,409
Restatement (Note 3)	(48,000)	
Net position, beginning of year, as restated	20,663,811	
Net position, end of year	$ 22,611,159	$ 20,711,811

Dinwiddie County Water Authority
Statements of Cash Flows
Years Ended June 30, 2018 and 2017

	2018	2017
Cash flows from operating activities:		
Cash receipts from customers	$ 3,607,053	$ 3,375,662
Cash receipts from other income	51,360	84,648
Cash payments to employees for services	(593,263)	(574,834)
Cash payments for water related services and supplies	(713,197)	(654,296)
Cash payments for sewage related services and supplies	(1,006,692)	(685,509)
Cash payments for shop maintenance expenses	(93,347)	(80,174)
Cash payments for customer accounts expenses	(111,461)	(118,337)
Cash payments for administrative expenses	(330,743)	(400,305)
Net cash provided by operating activities	809,710	946,855
Cash flows from noncapital financing activities:		
Service and connection fees	53,662	136,662
Costs paid on behalf of School Board	(115,698)	-
Change in customer deposits	20,261	25,662
Net cash provided (used) by noncapital financing activities	(41,775)	162,324
Cash flows from capital and related financing activities:		
Acquisition and construction of capital assets	(114,153)	(106,973)
Debt refinancing costs	-	(76,131)
County contributions	200,508	724,964
Economic development costs paid	(85,947)	-
Interest paid	(123,129)	(136,652)
Principal retired	(587,000)	(764,128)
Net cash used by capital and related financing activities	(709,721)	(358,920)
Cash flows from investing activities:		
Interest received	49,163	13,117
Net increase in cash and cash equivalents	107,377	763,336
Cash and cash equivalents, beginning of year	5,574,879	4,811,543
Cash and cash equivalents, end of year	$ 5,682,256	$ 5,574,879

See accompanying notes.

	2018	2017
Cash and cash equivalents, current assets	**$ 814,707**	$ 1,372,395
Cash and cash equivalents, restricted assets	**517,210**	498,903
Cash and cash equivalents, rate stabilization fund	**615,383**	606,373
Cash and cash equivalents, board designated	**3,734,956**	3,097,208
	$ 5,682,256	$ 5,574,879
Reconciliation of operating loss to net cash from operating activities:		
Operating loss	**$ (47,802)**	$ (179,919)
Adjustments to reconcile operating loss to net cash provided by operating activities:		
Depreciation	**984,784**	966,931
Amortization of sewer contract costs	**186,869**	186,909
Changes in assets and liabilities:		
Accounts receivable	**(49,437)**	(99,209)
Due from County	**(166,787)**	134,657
Prepaid expenses	**21,995**	(40,066)
Accounts payable and accrued expenses	**(24,202)**	6,991
Decrease in net pension asset/liability and related deferred inflows/outflows of resources	**(92,877)**	(29,439)
Decrease in net OPEB liability and related deferred inflows/outflows of resources	**(2,833)**	-
Net cash provided by operating activities	**$ 809,710**	$ 946,855
Supplemental disclosure of noncash financing and investing activities:		
Contributed capital	**$ 1,855,492**	$ -

Notes to Financial Statements

1. Organization and Nature of Business

Dinwiddie County Water Authority (Authority) was created by the Board of Supervisors of Dinwiddie County, Virginia under the provisions of the Virginia Water and Sewer Authorities Act. The Act provides that the Authority is subject in all respects to the jurisdiction of the Virginia State Water Control Board pursuant to the provisions of the State Water Control Law. The Authority was established for the purpose of providing and maintaining water and sewer facilities to residential and commercial customers within Dinwiddie County and is constantly improving and expanding its facilities to serve a greater number of residents and businesses.

2. Summary of Significant Accounting Policies

Reporting entity

The Authority is considered a component unit of Dinwiddie County (County) for governmental accounting standards purposes. The criteria for including the Authority within the County's reporting entity, as set forth in Governmental Accounting Standards Board (GASB) Statement No. 14, The Financial Reporting Entity, and amended by GASB Statement No. 61, The Financial Reporting Entity: Omnibus an amendment of GASB Statement No. 14 and No. 34, is financial accountability. Financial accountability is defined as appointment of a voting majority of the component unit's board and either the ability to impose the primary government's will or the possibility that the component unit will provide a financial benefit to, or impose a financial burden on, the primary government. The Authority's Board of Directors is appointed by the Board of Supervisors of Dinwiddie County. The Authority and Dinwiddie County have Support Agreements, whereby the County will, subject to appropriation, pay the Authority budgeted amounts for debt service of the Series 2005 and Series 2006 Water and Sewer Revenue Bonds and Series 2012 Water System Revenue Refunding Bond, for operation and maintenance of the Courthouse System and Church Road System, and for deficiencies in the operating revenues of the Authority's main water and sewer system. The Support Agreements also require the Director of the Authority to notify the County Administrator if in any month the Authority is unable to make its required debt service payment, and to request an appropriation from the Board of Directors to make up any deficiency. The existence of these Support Agreements satisfies the criteria of "imposing a financial burden on the primary government," thus making the County financially accountable for the Authority.

Basis of accounting

The Authority utilizes the economic resources management focus and the accrual basis of accounting in preparing its financial statements where revenues are recognized when earned and expenses when incurred.

Fund accounting

The accounts of the Authority are organized on the basis of funds which are divided based on the geographic location of the customers served. The operations of each fund are accounted for with a separate set of self-balancing accounts that comprise its assets, liabilities, net position, revenues and expenses as appropriate. The following funds have been consolidated for financial reporting purposes and all inter-fund balances and activity have been removed:

Operating Fund

The Operating Fund is used to account for activities which are similar to those often found in the private sector. All assets, liabilities, equities, revenues, expenses, and transfers relating to the Authority's business activities are accounted for through the Operating Fund. The measurement focus is upon determination of net income, financial position and cash flows.

Courthouse Fund

The Courthouse Fund accounts for the operations of the courthouse facilities in accordance with the Series 2004 Water and Sewer Revenue Refunding Bond Trust Agreement, which also governs the Series 2005 and Series 2006 Water and Sewer Revenue Bonds. The Series 2004 Water and Sewer Revenue Refunding Bonds were paid off in FY11.

Church Road System Fund

The Church Road System Fund accounts for the operations of the Church Road Water System facilities in accordance with the Series 1999 Water System Revenue Bond (replaced in fiscal year 2014 with the Series 2012 Water System Revenue Refunding Bond) Trust Agreement.

Reserve Fund

The Reserve Fund was used to account for the reserve of assets in accordance with the regulations established by the Rural Utility Service Bonds issued in 1996. This bond was refinanced during 2017 and the related funds were released. The Reserve Fund was out of use and closed as of June 30, 2017.

Cash and cash equivalents

For purposes of the statement of cash flows, the Authority considers all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents.

Some cash and cash equivalents have been designated by the board to offset the impact of future rate changes for customers, and also to fund future capital improvements.

Accounts receivable

The Authority evaluates its accounts receivable individually. A charge to income to absorb possible credit losses is provided when, in the opinion of management, it is appropriate. At June 30, 2018 and 2017, $31,155 of accounts receivable were not considered collectible and, as such, an allowance has been recorded.

Unbilled receivables

Unbilled receivables represent an estimate of the amount of July billings subsequent to year end that relate to service provided prior to year end. At June 30, 2018 and 2017, unbilled receivables of $294,875 and $276,163, respectively, were included in Accounts receivable – trade on the statement of net position. These amounts are considered to be fully collectible and, as such, no allowance has been recorded.

Property, plant and equipment

Property, plant and equipment are stated at cost and are depreciated using the straight-line method based on estimated useful lives of 5 to 50 years. When assets are disposed, the related costs and accumulated depreciation are removed from the respective accounts and any profit or loss on disposition is recognized currently.

Developer paid infrastructure is capitalized when ownership is transferred to the Authority. Such contributions are recognized at the estimated fair market value and are included as contributed capital on the statement of revenues, expenses, and changes in net position and are depreciated using the straight-line method based on estimated lives of 50 years.

Depreciable lives are as follows:

Buildings	40 years
Equipment	5 to 15 years
Infrastructures	20 to 50 years

Maintenance and ordinary repairs are charged to expense as incurred. Expenditures which materially increase values, change capacities or extend useful lives are capitalized.

Unamortized sewer contract costs

Unamortized sewer contract costs are being amortized over forty years using the straight-line method. The amortization of $186,869 and $186,909 for fiscal years 2018 and 2017, respectively, is included in sewage-treatment expense.

Unamortized deferred amount on refunding

The deferred amount on refunding, resulting from the advance refunding of the Series 1999 Revenue Bonds is being amortized using the effective interest method over the life of the Series 2012 Bond. The amortization of $7,078 and $7,858 is included in interest expense for fiscal year 2018 and 2017, respectively.

Compensated absences

All salaried and full time hourly employees are granted vacation benefits in varying amounts to specified maximums depending on length of service with the Authority. There is no accumulation of vacation from fiscal year to fiscal year. Sick leave is earned each month and may be accumulated without limit. Employees who retire from the Authority will be paid for 25% of sick leave accumulated, up to a maximum of $2,500.

Operating revenues and expenses

The Authority's policy is to report all revenues and expenses resulting from providing and maintaining water and sewer facilities to residential and commercial customers as operating revenues and expenses.

Credit risk

Financial instruments that potentially subject the Authority to concentrations of credit risk consist principally of cash, cash equivalents, and trade accounts receivable. The Authority places its cash and cash equivalents with high credit quality financial institutions whose credit ratings are monitored by management to minimize credit risk. The concentration of credit risk for accounts receivable is limited due to the mixture of customers between commercial and residential, and support agreements with Dinwiddie County.

The Authority has an agreement with the Commonwealth of Virginia, Department of Mental Health, Mental Retardation and Substance Abuse Services (DMHMRSAS) for the acceptance of wastewater generated at DMHMRSAS facilities. DMHMRSAS shall reimburse the Authority for the costs of all changes and improvements for the purposes of metering their flow. DMHMRSAS will pay the Authority, on a monthly basis, in accordance with the Authority's published service rates. The agreement shall remain in effect until 2036. Revenues of $164,528 and $208,046 for the years ended June 30, 2018 and 2017, respectively, are included in water and sewer charges on the statement of revenues, expenses and changes in net assets.

Pensions

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

Other post-employment benefits

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

Risk management

The Authority carries commercial insurance for various risks of loss including property, workers' compensation, theft, general liability, errors and omissions, employee health and accident, and public officials' liability. There have been no claims which have exceeded the amount insured resulting from these risks during the current year and there was no reduction in coverage during fiscal years 2018 and 2017.

Estimates

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses and disclosure of contingent assets and liabilities for the reported periods. Actual results could differ from those estimates and assumptions.

Subsequent events

In preparing these financial statements, the Authority has evaluated events and transactions for potential recognition or disclosure through October 9, 2018, the date the financial statements were issued.

3. Change in Accounting Principle / Restatement

The Authority implemented Governmental Accounting Standards Board (GASB) Statement 75, "Accounting and Financial Reporting for Post-employment Benefits Other than Pensions", in the fiscal year ended June 30, 2018. The implementation of the statement required the Authority to record beginning net OPEB liability and the effects on net position of contributions made by the Authority. As a result, net position as of June 30, 2017, decreased by $48,000. The balances and amounts as of June 30, 3017 and for the year then ended have not been restated due to the lack of information to accurately and completely restate such amounts.

4. Cash, Cash Equivalents and Investments

Deposits

Deposits with banks are covered by the Federal Deposit Insurance Corporation (FDIC) and collateralized in accordance with the Virginia Security for Public Deposits Act (the "Act") Section 2.2-4400 et. seq. of the Code of Virginia. Under the Act, banks and savings institutions holding public deposits in excess of the amount insured by the FDIC must pledge collateral to the Commonwealth of Virginia Treasury Board. Financial Institutions may choose between two collateralization methodologies and depending upon that choice, will pledge collateral that ranges in the amounts from 50% to 130% of excess deposits. Accordingly, all deposits are considered fully collateralized.

Investments

Investment Policy

Statutes authorize local governments and other public bodies 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), the Asian Development Bank, the African Development Bank, "prime quality" commercial paper and certain corporate notes, banker's acceptances, repurchase agreements and the State Treasurer's Local Government Investment Pool (LGIP).

In addition, any money held by the Trustee in any fund or account under any indenture may be invested and reinvested by the Trustee in any of the following investments:

a. direct obligations of, or obligations the payment of the principal and interest on which are unconditionally guaranteed by, the United States of America (government obligations);

b. bonds, notes and other evidences of indebtedness upon which there is no default (i)(A) to which the full faith and credit of the Commonwealth of Virginia or any of its political subdivisions are pledged for the payment of their principal and interest or, (B) which are issued by the Commonwealth of Virginia or any of its agencies, political subdivisions, districts, authorities or other political bodies, and (ii) that are rated in one of the two highest categories by Standard & Poor's Corporation;

c. certificates representing ownership of United States Treasury bond principal at maturity or coupons for accrual periods, which bonds or coupons are held by certain domestic banks or trust companies in the capacity of custodian, independent of the sellers of such certificates (Government Certificates);

d. bonds, notes, debentures, participation and other obligations issued by the Federal National Mortgage Association, Federal Home Loan Bank, Farm Credit System, Farm Credit System Financial Assistance Corporation, Student Loan Marketing Association, Resolution Funding Corporation, Federal Home Loan Mortgage Corporation, Tennessee Valley Authority and Government National Mortgage Association;

e. commercial paper that (i) has a maturity of 270 days or less, (ii) is rated by Standard & Poor's Corporation within its ratings of A-1 and (iii) compiles with the requirements of Section 2.1-328.1 of the Code of Virginia (1950), as amended, or any subsequent provision of law applicable thereto;

f. savings accounts, time deposits, certificates of deposit or other interest bearing accounts of any commercial bank located in the Commonwealth of Virginia, including the Trustee, provided that (i) such deposits are (A) secured in the manner required by the Virginia Security for Public Deposits Act or any successor provision of law or, (B) fully insured by the Federal Deposit Insurance Corporation or other federal insurance agency and (ii) no deposits made under this subsection will be made for a period in excess of five years;

g. savings accounts, time deposits and certificates of deposit of savings and loan associations that are under supervision of the Commonwealth of Virginia, and federal associations located in the Commonwealth of Virginia and under federal supervision, provided that (i) such deposits are (A) fully insured by the Federal Deposit Insurance Corporation or other federal insurance agency or, (B) secured in the manner required by the Virginia Security for Public Deposits Act or any successor provision of law and (ii) no deposits made under this subsection will be made for a period in excess of five years;

h. provided that it is rated in one of the two highest rating categories by Standard & Poor's Corporation, any other investment permitted for the type of money to be invested by (i) the Investment of Public Funds Act (Chapter 18, Title 2.1, Code of Virginia (1950), as amended), or (ii) Section 62.1-221 of the Act; and

i. Virginia State Non-Arbitrage Program securities.

Notwithstanding the foregoing, money held in a Revenue Fund or a Bond Fund may not be invested in the investments described in subparagraphs (e) and (i) above.

The Trustee may purchase any investments described in subparagraphs (a), (b) or (c) above under an overnight term or open repurchase agreement complying with the provisions of the indenture. In addition, investments in a money market or other fund, investments of which fund are exclusively in obligations or securities described in subparagraphs (a) and (c) above, are considered investments in obligations in subparagraphs (a) and (c) respectively.

Any such investments will be held by or under the Trustee's control and while so held shall be deemed a part of the fund or account in which such money was originally held, and the interest accruing thereon and any profit realized from such investments, including realized discounts on obligations purchased, shall be credited to such fund or account, and any loss resulting from such investments shall be charged to such fund or account.

Concentration of credit risk

The Policy establishes limitations on portfolio composition by issuer in order to control concentration of credit risk. No more than 5% of the Authority's portfolio will be invested in the securities of any one issuer with the exception of: (1) the U.S. government or agencies thereof, (2) fully insured/collateralized certificates of deposit or repurchase agreements that are collateralized by the U.S. government or agencies thereof, and (3) mutual funds whereby the portfolio is limited to U.S. government or agency securities.

5. Property, Plant and Equipment

Property, plant and equipment owned by the Authority consist of the following:

	Balance June 30, 2017	Increases	Decreases	Balance June 30, 2018
Operating fund:				
Capital assets not being depreciated:				
Land and improvements	$ 321,244	$ -	$ -	**$ 321,244**
Other capital assets:				
Buildings	219,092	-	-	**219,092**
Equipment	1,370,721	32,076	-	**1,402,797**
Infrastructure	21,435,098	1,937,569	-	**23,372,667**
Total other capital assets at historical cost	23,024,911	1,969,645	-	**24,994,556**
Accumulated depreciation for:				
Buildings	(167,545)	(4,062)	-	**(171,607)**
Equipment	(743,054)	(60,472)	-	**(803,526)**
Infrastructure	(11,773,506)	(497,183)	-	**(12,270,689)**
Total accumulated depreciation	(12,684,105)	(561,717)	-	**(13,245,822)**
Operating capital assets, net	10,662,050	1,407,928	-	**12,069,978**
Courthouse fund:				
Other capital assets:				
Buildings	2,595,208	-	-	**2,595,208**
Equipment	493,840	-	-	**493,840**
Infrastructure	4,349,442	-	-	**4,349,442**
Total other capital assets at historical cost	7,438,490	-	-	**7,438,490**

Accumulated depreciation for:				
Buildings	(1,586,068)	(74,154)	-	**(1,660,222)**
Equipment	(102,884)	(21,440)	-	**(124,324)**
Infrastructure	(1,807,573)	(193,186)	-	**(2,000,759)**
Total accumulated depreciation	(3,496,525)	(288,780)	-	**(3,785,305)**
Courthouse Fund capital assets, net	3,941,965	(288,780)	-	**3,653,185**
Church Road System Fund:				
Other capital assets:				
Buildings	1,025,547	-	-	**1,025,547**
Equipment	10,000	-	-	**10,000**
Infrastructure	3,838,575	-	-	**3,838,575**
Total other capital assets at historical cost	4,874,122	-	-	**4,874,122**
Accumulated depreciation for:				
Buildings	(364,912)	(21,267)	-	**(386,179)**
Equipment	(2,833)	(1,000)	-	**(3,833)**
Infrastructure	(1,850,722)	(112,020)	-	**(1,962,742)**
Total accumulated depreciation	(2,218,467)	(134,287)	-	**(2,352,754)**
Church Road System Fund capital assets, net	2,655,655	(134,287)	-	**2,521,368**
	$ 17,259,670	$ 984,861	$ -	**$ 18,244,531**

6. Advance Refunding

On August 1, 2012, the Authority issued $2.64 million in Revenue Bonds with a coupon rate ranging between 2.1 and 2.7 percent to advance refund $3.055 million of outstanding bonds with an interest rate of 5.8 percent. The $2,584,505 in net proceeds (after a bond discount of $7,491 and payment of $48,004 in underwriting fees and other issuance costs), along with $546,575 in existing reserves, was used to purchase U.S. government securities. Those securities were deposited in an irrevocable trust with an escrow agent to provide for all future debt service payments on the bonds. These bonds were discharged in September 2012.

The advance refunding resulted in a difference between the reacquisition price and the net carrying amount of the old debt of $76,080. This difference, reported in the accompanying financial statements as a deferred amount on bond refunding, is being charged to the Authority's operations through the year 2025 using the effective-interest method. The Authority completed the advance refunding to reduce its total debt service payments over the next 12 years by approximately $1.3 million and to obtain an economic gain (difference between the present values of the old and new debt service payments) of approximately $1 million.

7. Bonds Payable

Bonds payable consist of the following issues:

Description	Original Amount	Amount Outstanding June 30, 2018	Amount Outstanding June 30, 2017
Series 2016A - Main System Bonds: $3,486,000 due in annual installments ranging from $186,000 to $257,000, through 2032, bearing a 2.27% interest. The revenues of the Authority's Water and Sewer System, exclusive of the Courthouse and Church Road System Funds, are pledged to pay the principal and interest of the bonds. No debt service reserve is required.	$ 3,486,000	$ 3,105,000	$ 3,291,000
Series 2016B - Main System Bonds: $962,000 due in annual installments ranging from $189,000 to $198,000, through 2021, bearing a 1.31% interest. The revenues of the Authority's Courthouse Fund are pledged to pay the principal and interest of the bonds. No debt service reserve is required.	962,000	582,000	773,000
Series 2012 Water System Revenue Refunding Bond: $2,640,000 due in annual installments ranging from $195,000 to $240,000, through 2025, with an interest rate ranging between 2.7% and 2.1%. The revenues of the Authority's Church Road System Fund are pledged to pay the principal and interest of the bond. No debt service reserve is required.	2,640,000	1,590,000	1,800,000
Total bonds payable		$ 5,277,000	$ 5,864,000
Bonds payable, current		$ 598,000	$ 587,000
Bonds payable, noncurrent		4,679,000	5,277,000
		$ 5,277,000	$ 5,864,000

Activity in the bonds payable and related accounts for fiscal year 2018 follows:

	Balance June 30, 2017	Issued	Retired	Balance June 30, 2018	Amount Due Within One Year
Total bonds outstanding	**$ 5,864,000**	**$ -**	**$ (587,000)**	**$ 5,277,000**	**$ 598,000**

Activity in the bonds payable and related accounts for fiscal year 2017 follows:

	Balance June 30, 2017	Issued	Retired	Balance June 30, 2018
Total bonds outstanding	$ 6,628,128	$ 4,448,000	$ (5,212,128)	$ 5,864,000

Future principal and interest obligations related to bond indebtedness are as follows:

Year Ending June 30,	Principal	Interest	Total
2019	$ 598,000	$ 111,842	$ 709,842
2020	607,000	100,365	707,365
2021	618,000	88,005	706,005
2022	429,000	77,095	506,095
2023	444,000	66,881	510,881
2024 - 2028	1,591,000	196,020	1,787,020
2029 - 2032	990,000	49,781	1,039,781
	$ 5,277,000	$ 689,989	$ 5,966,989

8. Restricted Net Position

Restricted net position represent the portion of total net position held for customer deposits and purposes restricted by granting entity.

9. Defined Benefit Pension Plan

The Authority contributes to the Virginia Retirement System (VRS), an agent, multiple-employer defined benefit pension plan administered by the VRS.

Plan description

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

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

VRS PLAN 1

About Plan 1
Plan 1 is a defined benefit plan. The retirement benefit is based on a member's age, creditable service and average final compensation at retirement using a formula.

Eligible members
Employees are in VRS Plan 1 if their membership date is before July 1, 2010, and they were vested as of January 1, 2013, and they have not taken a refund.

Hybrid opt-in election
VRS non-hazardous duty covered Plan 1 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014.

The Hybrid Retirement Plan's effective date for eligible VRS Plan 1 members who opted in was July 1, 2014.

If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement Plan.

Members who were eligible for an optional retirement plan (ORP) and had prior service under VRS Plan 1 were not eligible to elect the Hybrid Retirement Plan and remain as VRS Plan 1 or ORP.

Retirement contributions
Employees contribute 5% of their compensation each month to their member contribution account through a pre-tax salary reduction. Member contributions are tax-deferred until they are withdrawn as part of a retirement benefit or as a refund. The employer makes a separate actuarially determined contribution to VRS for all covered employees. VRS invests both member and employer contributions to provide funding for the future benefit payment.

Creditable service
Creditable service includes active service. Members earn creditable service for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional creditable service the member was granted. A member's total creditable service is one of the factors used to determine their eligibility for retirement and to calculate their retirement benefit. It also may count toward eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit.

Vesting
Vesting is the minimum length of service a member needs to qualify for a future retirement benefit. Members become vested when they have at least five years (60 months) of creditable service. Vesting means members are eligible to qualify for retirement if they meet the age and service requirements for their plan. Members also must be vested to receive a full refund of their member contribution account balance if they leave employment and request a refund.

Members are always 100% vested in the contributions that they make.

Calculating the benefit
The Basic Benefit is calculated based on a formula using the member's average final compensation, a retirement multiplier and total service credit at retirement. It is one of the benefit payout options available to a member at retirement.

An early retirement reduction factor is applied to the Basic Benefit if the member retires with a reduced retirement benefit or selects a benefit payout option other than the Basic Benefit.

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

Service retirement multiplier
The retirement multiplier is a factor used in the formula to determine a final retirement benefit. The retirement multiplier for non-hazardous duty members is 1.7%. The retirement multiplier for sheriffs and regional jail superintendents is 1.85%. The retirement multiplier of eligible political subdivision hazardous duty employees other than sheriffs and regional jail superintendents is 1.7% or 1.85% as elected by the employer.

Normal retirement age
Age 65. Political subdivisions hazardous duty employees: Age 60.

Earliest unreduced retirement eligibility
Members who are not in hazardous duty positions are eligible for an unreduced retirement benefit at age 65 with at least five years (60 months) of creditable service or at age 50 with at least 30 years of creditable service.

Hazardous duty members are eligible for an unreduced retirement benefit at age 60 with at least five years of creditable service or age 50 with at least 25 years of creditable service.

Earliest reduced retirement eligibility
Members who are not in hazardous duty positions may retire with a reduced benefit as early as age 55 with at least five years (60 months) of creditable service or age 50 with at least 10 years of creditable service.

Hazardous duty members are eligible for a reduced retirement benefit at age 50 with at least five years of creditable service.

Cost-of-living adjustment (COLA) in retirement
The Cost-of-Living Adjustment (COLA) matches the first 3% increase in the Consumer Price Index for all Urban Consumers (CPI-U) and half of any additional increase (up to 4%) up to a maximum COLA of 5%.

Eligibility
For members who retire with an unreduced benefit or with a reduced benefit with at least 20 years of creditable service, the COLA will go into effect on July 1 after one full calendar year from the retirement date.

For members who retire with a reduced benefit and who have less than 20 years of creditable service, the COLA will go into effect on July 1 after one calendar year following the unreduced retirement eligibility date.

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

- The member is within five years of qualifying for an unreduced retirement benefit as of January 1, 2013.
- The member retires on disability.
- The member retires directly from short-term or long-term disability under the Virginia Sickness and Disability Program (VSDP).
- The member is involuntarily separated from employment for causes other than job performance or misconduct and is eligible to retire under the Workforce Transition Act or the Transitional Benefits Program.
- The member dies in service and the member's survivor or beneficiary is eligible for a monthly death-in-service benefit. The COLA will go into effect on July 1 following one full calendar year (January 1 to December 31) from the date the monthly benefit begins.

Disability coverage
Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.7% on all service, regardless of when it was earned, purchased or granted.

Purchase of prior service
Members may be eligible to purchase service from previous public employment, active duty military service, an eligible period of leave or VRS refunded service as creditable service in their plan. Prior creditable service counts toward vesting, eligibility for retirement and the health insurance credit. Only active members are eligible to purchase prior service. When buying service, members must purchase their most recent period of service first. Members also may be eligible to purchase periods of leave without pay.

VRS PLAN 2

About Plan 2
Plan 2 is a defined benefit plan. The retirement benefit is based on a member's age, creditable service and average final compensation at retirement using a formula.

Eligible members
Employees are in VRS Plan 2 if their membership date is on or after July 1, 2010, or their membership date is before July 1, 2010, and they were not vested as of January 1, 2013.

Hybrid opt-in election
VRS Plan 2 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014.

The Hybrid Retirement Plan's effective date for eligible VRS Plan 2 members who opted in was July 1, 2014.

If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement Plan.

Members who were eligible for an optional retirement plan (ORP) and have prior service under VRS Plan 2 were not eligible to elect the Hybrid Retirement Plan and remain as VRS Plan 2 or ORP.

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

Creditable service
Same as VRS Plan 1.

Vesting
Same as VRS Plan 1.

Calculating the benefit
See definition under VRS Plan 1.

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

Service retirement multiplier
Same as Plan1 for service earned, purchased or granted prior to January 1, 2013. For non-hazardous duty members the retirement multiplier is 1.65% for creditable service earned, purchased or granted on or after January 1, 2013. The retirement multiplier for sheriffs and regional jail superintendents and for hazardous duty employees is the same as Plan 1.

Normal retirement age
Normal Social Security retirement age. Political subdivisions hazardous duty employees: same as Plan 1.

Earliest unreduced retirement eligibility
Members who are not in hazardous duty positions are eligible for an unreduced retirement benefit when they reach normal Social Security retirement age and have at least five years (60 months) of creditable service or when their age and service equal 90.

Hazardous duty members: same as Plan 1.

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

Hazardous duty members: same as Plan 1.

Cost-of-Living Adjustment (COLA) in retirement
The Cost-of-Living Adjustment (COLA) matches the first 2% increase in the CPI-U and half of any additional increase (up to 2%), for a maximum COLA of 3%.

Eligibility
Same as VRS Plan 1

Exceptions to COLA effective dates
Same as VRS Plan 1

Disability coverage
Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.65% on all service, regardless of when it was earned, purchased or granted.

Purchase of prior service
Same as VRS Plan 1.

Hybrid Retirement Plan

About the hybrid retirement plan
The Hybrid Retirement Plan combines the features of a defined benefit plan and a defined contribution plan. Most members hired on or after January 1, 2014 are in this plan, as well as VRS Plan 1 and VRS Plan 2 members who were eligible and opted into the plan during a special election window. (See “Eligible Members”)

- The defined benefit is based on a member’s age, creditable service and average final compensation at retirement using a formula.
- The benefit from the defined contribution component of the plan depends on the member and employer contributions made to the plan and the investment performance of those contributions.
- In addition to the monthly benefit payment payable from the defined benefit plan at retirement, a member may start receiving distributions from the balance in the defined contribution account, reflecting the contributions, investment gains or losses, and any required fees.

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

- Political subdivision employees*
- Members in VRS Plan 1 or VRS Plan 2 who elected to opt into the plan during the election window held January 1-April 30, 2014; the plan’s effective date for opt-in members was July 1, 2014

***Non-eligible members**
Some employees are not eligible to participate in the Hybrid Retirement Plan. They include:

- Political subdivision employees who are covered by enhanced benefits for hazardous duty employees

Those employees eligible for an optional retirement plan (ORP) must elect the ORP plan or the Hybrid Retirement Plan. If these members have prior service under VRS Plan 1 or VRS Plan 2, they are not eligible to elect the Hybrid Retirement Plan and must select VRS Plan 1 or VRS Plan 2 (as applicable) or ORP.

Retirement contributions
A member’s retirement benefit is funded through mandatory and voluntary contributions made by the member and the employer to both the defined benefit and the defined contribution components of the plan. Mandatory contributions are based on a percentage of the employee’s creditable compensation and are required from both the member and the employer. Additionally, members may choose to make voluntary contributions to the defined contribution component of the plan, and the employer is required to match those voluntary contributions according to specified percentages.

Creditable service

Defined benefit component

Under the defined benefit component of the plan, creditable service includes active service. Members earn creditable service for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional creditable service the member was granted. A member's total creditable service is one of the factors used to determine their eligibility for retirement and to calculate their retirement benefit. It also may count toward eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit.

Defined contributions component

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

Vesting

Defined benefit component

Defined benefit vesting is the minimum length of service a member needs to qualify for a future retirement benefit. Members are vested under the defined benefit component of the Hybrid Retirement Plan when they reach five years (60 months) of creditable service. VRS Plan 1 or VRS Plan 2 members with at least five years (60 months) of creditable service who opted into the Hybrid Retirement Plan remain vested in the defined benefit component.

Defined contributions component

Defined contribution vesting refers to the minimum length of service a member needs to be eligible to withdraw the employer contributions from the defined contribution component of the plan.

Members are always 100% vested in the contributions that they make.

Upon retirement or leaving covered employment, a member is eligible to withdraw a percentage of employer contributions to the defined contribution component of the plan, based on service.

- After two years, a member is 50% vested and may withdraw 50% of employer contributions.
- After three years, a member is 75% vested and may withdraw 75% of employer contributions.
- After four or more years, a member is 100% vested and may withdraw 100% of employer contributions.

Distribution is not required by law until age 70½.

Calculating the benefit

Defined benefit component

See definition under VRS Plan 1

Defined contribution component

The benefit is based on contributions made by the member and any matching contributions made by the employer, plus net investment earnings on those contributions.

Average final compensation

Same as VRS Plan 2. It is used in the retirement formula for the defined benefit component of the plan.

Service retirement multiplier

Defined benefit component

The retirement multiplier is 1.0%.

For members that opted into the Hybrid Retirement Plan from VRS Plan 1 or VRS Plan 2, the applicable multipliers for those plans will be used to calculate the retirement benefit for service credited in those plans.

Normal retirement age

Defined benefit component
Same as VRS Plan 2.

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

Earliest unreduced retirement eligibility

Defined benefit component
Members are eligible for an unreduced retirement benefit when they reach normal Social Security retirement age and have at least five years (60 months) of creditable service or when their age and service equal 90.

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

Earliest reduced retirement eligibility

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

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

Cost-of-Living Adjustment (COLA) in retirement

Defined benefit component
Same as VRS Plan 2.

Defined contribution component
Not applicable.

Eligibility
Same as VRS Plan 1 and VRS Plan 2.

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

Disability coverage
Eligible political subdivision (including VRS Plan 1 and VRS Plan2 opt-ins) participate in the Virginia Local Disability Program (VLDP) unless their local governing body provides and employer-paid comparable program for its members.

Hybrid members (including VRS Plan 1 and VRS Plan 2 opt-ins) covered under VSDP or VLDP are subject to a one-year waiting period before becoming eligible for non-work related disability benefits.

Purchase of prior service

Defined benefit component
Same as VRS Plan 1, with the following exceptions:

- Hybrid Retirement Plan members are ineligible for ported service.

Defined contribution component
Not applicable.

Employees covered by benefit terms

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

	Number
Inactive members or their beneficiaries currently receiving benefits	5
Inactive members:	
Vested	2
Non-vested	8
Active elsewhere in VRS	4
Total inactive members	14
Active members	10
Total	29

Contributions

The contributions requirement for active employees is governed by §51.1-145 of the *Code of Virginia*, as amended, but may be impacted as a result of funding options provided to political subdivisions by the Virginia General Assembly. Employees are required to contribute 5.00% of their compensation toward their retirement. Prior to July 1, 2012, all or part of the 5.00% member contribution may have been assumed by the employer. Beginning July 1, 2012, new employees were required to pay the 5.00% member contribution. In addition, for existing employees, employers were required to begin making the employee pay the 5.00% member contribution. This could be phased in over a period of up to 5 years and the employer is required to provide a salary increase equal to the amount of the increase in the employee-paid member contribution.

The political subdivision's contractually required contribution rate for the year ended June 30, 2018 was 6.29% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2015.

This rate, when combined with employee contributions, was expected to finance the costs of benefits earned by employee during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the pension plan from the Authority were $34,272 and $33,059 for the years ended June 30, 2018 and 2017, respectively.

Net pension liability (asset)

The Authority's net pension liability (asset) was measured as of June 30, 2017. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation performed as of June 30, 2016, using updated actuarial assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2017.

Actuarial assumptions

The total pension liability for General Employees in the Authority's Retirement Plan was based on an actuarial valuation as of June 30, 2016, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2017.

Inflation	2.5%
Salary increases, including inflation	3.5% - 5.35%
Investment rate of return	7.0%, net of pension plan investment expenses, including inflation*

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

Mortality rates:

Largest 10 – non-Hazardous Duty: 20% of deaths are assumed to be service related

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

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

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

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

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

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

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

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

Largest 10 – Non-Hazardous Duty:

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled):
Update to a more current mortality table – RP-2014 projected to 2020

Retirement Rates:
Lowered rates at older ages and changed final retirement from 70 to 75

Withdrawal Rates:
Adjusted rates to better fit experience at each year age and service through 9 years of service

Disability Rates:
Lowered rates

Salary Scale:
No change

Line of Duty Disability:
Increase rate from 14% to 20%

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

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled):
Update to a more current mortality table – RP-2014 projected to 2020

Retirement Rates:
Lowered rates at older ages and changed final retirement from 70 to 75

Withdrawal Rates:
Adjusted rates to better fit experience at each year age and service through 9 years of service

Disability Rates:
Lowered rates

Salary Scale:
No change

Line of Duty Disability:
Increase rate from 14% to 15%

Long-term expected rate of return

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

Asset Class (Strategy)

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

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

Discount rate

The discount rate used to measure the total pension liability was 7.00%. The projection of cash flows used to determine the discount rate assumed that System member contributions will be made per the VRS Statutes and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Through the fiscal year ending June 30, 2019, the rate contributed by the employer for the Political Subdivision Retirement Plan will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly. From July 1, 2019 on, participating employers are assumed to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the pension plan’s fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore the Long-term expected rate of return was applied to all periods of projected benefit payments to determine the total pension liability.

Changes in net pension liability

	Total Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (Asset) (a)- (b)
Balances at June 30, 2016	$ 1,882,341	$ 1,879,915	$ 2,426
Changes for the year:			
Service cost	64,942	-	64,942
Interest	130,860	-	130,860
Changes of assumptions	(28,942)	-	(28,942)
Difference between expected and actual experience	(77,997)	-	(77,997)
Contributions, employer	-	34,106	(34,106)
Contributions, employee	-	26,279	(26,279)
Net investment income	-	233,304	(233,304)
Benefit payments, including refunds of employee contributions	(25,823)	(25,823)	-
Administrative expense	-	(1,288)	1,288
Other changes	-	(210)	210
Net changes	63,040	266,368	(203,328)
Balances at June 30, 2017	$ 1,945,381	$ 2,146,283	$ (200,902)

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

The following represents the net pension liability calculated using the stated discount rate of 7.00%, as well as what the net position liability would be if it were calculated using a stated discount rate that is one-percentage-point lower (6.00%) or one-percentage-point higher (8.00%) than the current rate:

	1% Decrease 6.00%	Current Discount Rate 7.00%	1% Increase 8.00%
Plan's Net Pension Liability (Asset)	$ 67,094	$ (200,902)	$ (425,355)

Pension expense and deferred outflows of resources and deferred inflows of resources related to pensions

For the year ending June 30, 2018 and 2017, the Authority recognized pension expense (recovery) of $(57,558) and $3,620. At June 30, 2018 and 2017, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
June 30, 2018		
Differences between expected and actual experience	**$ -**	**$ 69,837**
Changes of assumptions	**-**	**17,225**
Employer contributions made subsequent to measurement date	**34,272**	**-**
Net difference between projected and actual earnings on plan investments	**-**	**33,428**
	$ 34,272	**$ 120,490**

June 30, 2017				
Differences between expected and actual experience	$	1,725	$	58,370
Employer contributions made subsequent to measurement date		33,059		-
Net difference between projected and actual earnings on plan investments		47,819		-
	$	82,603	$	58,370

$34,272 reported as deferred outflows of resources related to pensions resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction (increase) to the Net Pension Liability (Asset) in the fiscal year ending June 30, 2019. Other amounts reported as deferred inflows and outflows of resources related to pensions will be recognized in pension expense in future periods as follows:

2019	$	(86,019)
2020		(13,172)
2021		(1,190)
2022		(20,109)
Total	$	(120,490)

Pension Plan Data

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

10. Other Post-Employment Benefits

Plan Description

All full-time, salaried permanent employees of the state agencies, teachers and employees of participating political subdivisions are automatically covered by the VRS Group Life Insurance Program upon employment. This plan is administered by the Virginia Retirement System (the System), along with pensions and other OBEB plans, for public employer groups in the Commonwealth of Virginia.

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

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

Eligible Employees

The Group Life Insurance Program was established July 1, 1960, for state employees, teachers and employees of political subdivisions that elect the program.

Basic group life insurance coverage is automatic upon employment. Coverage end for employees who leave their position before retirement eligibility or who take a refund of their member contributions and accrued interest.

Benefit Amounts

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

- Natural Death Benefit – The natural death benefit is equal to the employee's covered compensation rounded to the next highest thousand and then doubled.
- Accidental Death Benefit – The accidental death benefit is double the natural death benefit.
- Other Benefit Provisions – In addition to the basic natural and accidental death benefits, the program provides additional benefits provided under specific circumstances. These include:
  - Accidental dismemberment benefit
  - Safety belt benefit
  - Repatriation benefit
  - Felonious assault benefit
  - Accelerated death benefit option

Reduction in benefit Amounts

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

Minimum Benefit Amount and Cost-of-Living Adjustment (COLA)

For covered members with at least 30 years of creditable service, there is a minimum benefit payable under the Group Life Insurance Program. The minimum benefit was set at $8,000 by statute. This amount is increased annually based on the VRS Plan 2 cost-of-living adjustment and is currently $8,111.

Contributions

The contribution requirements for the Group Life Insurance Program are governed by §51.1-506 and §51.1-508 of the *Code of Virginia*, as amended, but may be impacted as a result of funding provided to state agencies and school divisions by the Virginia General Assembly. The total rate for the Group Life Insurance Program was 1.31% of covered employee compensation. This was allocated into an employee and an employer component using a 60/40 split. The employee component was 0.79% (1.31% X 60%) and the employer component was 0.52% (1.31% X 40%). Employers may elect to pay all or part of the employee contribution, however the employer must pay all of the employer contribution. Each employer's contractually required employer contribution rate for the year ended June 30, 2018 was 0.52% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2015. The actuarially determined rate, when combined with employee contributions, was expected to finance the costs of benefits payable during the year, with an additional amount to finance any unfunded accrued liability. Contribution to the Group Life Insurance Program from the entity were $2,833 and $2,733 for the year ended June 30, 2018, and June 30, 2017, respectively.

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

At June 30, 2018, the entities reported a liability of $43,000 for its proportionate share of the Net GLI OPEB Liability. The Net GLI OPEB Liability was measured as of June 30, 2017 and the total GLI OPEB liability used to calculate the Net GLI OPEB Liability was determined by an actuarial valuation as of that date. The covered employer's proportion of the Net GLI OPEB Liability was based on the covered employer's actuarially determined employer contributions to the Group Life Insurance Program for the year ended June 30, 2017 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2017, the participating employer's proportion was 0.00285% as compared to 0.00283% at June 30, 2016.

For the year ended June 30, 2018, the participating employer recognized GLI OPEB expense of $0. Since there was a change in proportionate share between measurement dates, a portion of the GLI OPEB expense was related to deferred amounts from changes in proportion.

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

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ -	$ 1,000
Changes of assumptions	-	2,000
Employer contributions made subsequent to measurement date	2,833	-
Net difference between projected and actual earnings on plan investments	-	2,000
	$ 2,833	$ 5,000

$2,833 reported as deferred outflows of resources related to the GLI OPEB resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction to the Net OPEB Liability in the fiscal year ending June 30, 2019. Other amounts reported as deferred inflows and outflows of resources related to the GLI OPEB will be recognized in the GLI OPEB expense in future periods as follows:

2019	$ (1,000)
2020	(1,000)
2021	(1,000)
2022	(1,000)
2023	(1,000)
Total	$ (5,000)

Actuarial Assumptions

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

Inflation 2.5 percent

Salary increases, including inflation 3.5 percent – 5.35 percent

Investment rate of return 7.0 Percent, net of investment expenses, including inflation*

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

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

Pre-Retirement:

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

Post-Retirement:

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

Post-Disablement:

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

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

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

Net GLI OPEB Liability

The net OPEB liability (NOL) for the Group Life Insurance Program represents the program's total OPEB liability determined in accordance with GASB Statement No. 74, less the associated fiduciary net position. As of June 30, 2017, NOL amounts for the Group Life Insurance Program is as follows (amounts expressed in thousands):

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

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

Long-Term Expected Rate of Return

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

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

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

Discount Rate

The discount rate used to measure the total GLI OPEB liability was 7.00%. The projection of cash flows used to determine the discount rate assumed that member contributions will be made per the VRS guidance and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Through the fiscal year ending June 30, 2019, the rate contributed by the entity for the GLI OPEB will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly. From July 1, 2019 on, employers are assumed to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the GLI OPEB's fiduciary net position was projected to be available to make all projected future benefit payments of eligible employees. Therefore the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total GLI OPEB liability.

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

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

	1% Decrease 6.00%	Current Discount Rate 7.00%	1% Increase 8.00%
Employer's proportionate share of the Group Life Insurance Program Net OPEB Liability	$ 55,000	$ 43,000	$ 33,000

Group Life Insurance Program Fiduciary Net Position

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

11. Purchase Agreements and Other Commitments

The County of Dinwiddie has a contract with the Appomattox River Water Authority (ARWA) for the purchase of an adequate supply of filtered water for the inhabitants of Dinwiddie County. That amount is then, by agreement, billed to the Authority. Water purchases for resale under this agreement for the years ended June 30, 2018 and 2017, totaled $499,476 and $543,699, respectively. ARWA is in the initial stages of an approximately $90,000,000 improvement which will be financed through the issuance of bonds. The County of Dinwiddie will be responsible for 6.75% of the debt service costs, which are expected to be passed on to the Authority.

The Authority has an agreement with the Town of McKenney for the supply of water and sewage disposal for customers of the Authority located around the Town. This agreement is automatically renewed annually unless either party gives notice of termination. For the years ended June 30, 2018 and 2017, water purchases for resale totaled $13,854 and $9,498, respectively, and sewage disposal charges totaled $10,803 and $8,526, respectively.

The Authority and Dinwiddie County along with the City of Petersburg, the City of Colonial Heights, Chesterfield County, and Prince George County are the members of the South Central Wastewater Authority (SCWWA). The SCWWA is a regional authority created to own and operate the existing 20 million gallon wastewater treatment facility located in the City of Petersburg. This agreement is in effect until the SCWWA’s RLF Bond, the City of Petersburg’s debt and any other SCWWA bonds have been paid or are deemed no longer outstanding and, all incorporating subdivisions have unanimously agreed to such termination.

The agreement with SCWWA for wastewater conveyance expires July 2036. Sewage disposal charges totaled $592,515 and $628,699 for the years ended June 30, 2018 and 2017, respectively. These amounts are subject to final adjustment, which is not known until the following fiscal year; therefore, the final adjustment is not reflected in these financial statements. However, the impact is not expected to be significant. The Authority’s cost of $7,389,111 for ten percent of sewer treatment capacity and the connection fee to SCWWA are being amortized over forty years. The SCWWA is in the initial stages of an approximately $60,000,000 improvement which will be financed through the issuance of bonds. Dinwiddie County will be responsible for 10% of the debt service costs.

12. Related Parties

The Executive Director serves on SCWWA’s Board. The Authority’s relationship with SCWWA is discussed at Note 9. The Authority has also entered into several support agreements with Dinwiddie County related to the Courthouse and Church Road systems. Payments received from the County pursuant to these agreements are included in Contributions from County on the Statements of Revenues, Expenses and Changes in Net Position.

13. Leases

The Authority entered into a communications site lease agreement with a wireless communications services company for the use of land owned by the Authority. The lease, beginning in October 2006, is for a five year period with five optional renewal periods of five year terms. The base rent of $1,500 increases by 3% each year. For the years ended June 30, 2018 and 2017, lease revenue to the Authority was $24,735, and $24,014, respectively, with the current renewal period expiring in September 2021.

Minimum future lease revenue is as follows:

2019	$	25,477
2020		26,241
2021		27,028
2022		6,807
Total	$	85,553

Required Supplementary Information

Dinwiddie County Water Authority
Schedule of Changes in Net Pension Liability and Related Ratios

	2018	2017	2016	2015
Total pension liability:				
Service cost	**$ 64,942**	$ 61,551	$ 63,717	$ 57,001
Interest	**130,860**	126,276	117,114	110,002
Changes of assumptions	**(28,942)**	-	-	-
Differences between expected and actual experience	**(77,997)**	(93,322)	6,145	-
Benefit payments, including refunds of employee contributions	**(25,823)**	(32,217)	(79,952)	(50,876)
Net change in total pension liability:	**63,040**	62,288	107,024	116,127
Total pension liability, beginning	**1,882,341**	1,820,053	1,713,029	1,596,902
Total pension liability, ending (a)	**$ 1,945,381**	$ 1,882,341	$ 1,820,053	$ 1,713,029
Plan fiduciary net position:				
Contributions, employer	**$ 34,106**	$ 44,072	$ 42,791	$ 50,135
Contributions, employee	**26,279**	25,387	24,649	25,321
Net investment income	**233,304**	33,384	79,789	237,097
Benefit payments	**(25,823)**	(32,217)	(79,952)	(50,876)
Administrative expenses	**(1,288)**	(1,096)	(1,090)	(1,244)
Other changes	**(210)**	(14)	(18)	12
Net change in plan fiduciary net position	**266,368**	69,516	66,169	260,445
Plan fiduciary net position, beginning	**1,879,915**	1,810,399	1,744,230	1,483,785
Plan fiduciary net position, ending (b)	**$ 2,146,283**	$ 1,879,915	$ 1,810,399	$ 1,744,230
Authority's net pension liability (asset), ending (a) - (b)	**$ (200,902)**	$ 2,426	$ 9,654	$ (31,201)
Plan fiduciary net position as a percentage of the total pension liability	**110.3%**	99.9%	99.5%	101.8%
Covered payroll*	**$ 525,576**	$ 507,747	$ 492,984	$ 552,723
Net pension liability (asset) as a percentage of covered payroll	**-38.2%**	0.5%	2.0%	-5.6%

*Covered payroll represents the total pensionable payroll for employees covered under the pension plan, in accordance with GASB Statement No. 82.

Note: Information in this schedule is presented for the year in which information is available. Information will be added each year until a full 10-year trend is presented.

Dinwiddie County Water Authority
Schedule of Employer's Share of Net OPEB Liability, Group Life Insurance Program

Year Ended June 30,*		2017
Employer's proportion of the net OPEB liability		0.00285%
Employer's proportionate share of the net OPEB liability	$	43,000
Employer's covered payroll	$	525,576
Employer's proportionate share of the net OPEB liability as a percentage of its covered payroll		8.18%
Plan fiduciary net position as a percentage of the total OPEB liability		48.86%

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

Note: Information in this schedule is presented for the year in which information is available. Information will be added each year until a full 10-year trend is presented.

Schedule of Employer Contributions - Pension

Date	Contractually required contribution	Contributions in relation to the actuarially determined contribution	Contribution deficiency (excess)	Employer's covered payroll	Contributions as a percentage of covered payroll
2018	$ 34,272	$ 34,272	$ -	$ 544,800	6.29%
2017	$ 33,059	$ 33,059	$ -	$ 525,576	6.29%
2016	$ 44,072	$ 44,072	$ -	$ 507,747	8.68%
2015	$ 42,791	$ 42,791	$ -	$ 492,984	8.68%

Schedule of Employer Contributions - OPEB

Date	Contractually required contribution	Contributions in relation to the contractually required contribution	Contribution deficiency (excess)	Employer's covered payroll	Contributions as a percentage of covered payroll
2018	$ 2,833	2,833	$ -	$ 544,800	0.52%
2017	$ 2,733	$ 2,733	$ -	$ 525,576	0.52%

Note: Information in this schedule is presented for the year in which information is available. Information will be added each year until a full 10-year trend is presented.

Notes to Required Supplementary Information

1. Changes of benefit terms, Pension

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

2. Changes of benefit terms, OPEB

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

3. Changes of assumptions, Pension and OPEB

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

Largest 10 Locality Employers – General Employees (Non-Hazardous Duty):

- Mortality Rates (Pre-retirement, post-retirement healthy, and disabled): Update to a more current mortality table - RP-2014 projected to 2020
- Retirement Rates: Lowered rates at older ages and changed final retirement from 70 to 75
- Withdrawal Rates: Adjusted rates to better fit experience at each year age and service through 9 years of service
- Disability Rates: Lowered rates
- Salary Scale: No change
- Line of Duty Disability: Increase rate from 14% to 20%

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

- Mortality Rates (Pre-retirement, post-retirement healthy, and disabled): Update to a more current mortality table - RP-2014 projected to 2020
- Retirement Rates: Lowered rates at older ages and changed final retirement from 70 to 75
- Withdrawal Rates: Adjusted rates to better fit experience at each year age and service through 9 years of service
- Disability Rates: Lowered rates
- Salary Scale: No change
- Line of Duty Disability: Increase rate from 14% to 15%

Supplementary Information

Dinwiddie County Water Authority
Combining Statement of Net Position
June 30, 2018

	Operating Fund	Courthouse Fund	Church Road System Fund	Total
ASSETS				
Current assets:				
Cash and cash equivalents	$ 312,195	$ 127,813	$ 374,699	$ 814,707
Accounts receivable, net	446,739	7,090	95,386	549,215
Due from County	199,851	115,698	20,409	335,958
Prepaid expenses	32,597	4,065	4,065	40,727
Total current assets	991,382	254,666	494,559	1,740,607
Restricted assets:				
Cash and cash equivalents	517,210	-	-	517,210
Property, plant and equipment, net:				
Property, plant and equipment, net of accumulated depreciation	12,069,978	3,653,185	2,521,368	18,244,531
Other assets:				
Cash and cash equivalents, rate stabilization fund	615,383	-	-	615,383
Cash and cash equivalents, board designated	2,644,037	350,883	740,036	3,734,956
Unamortized sewer contract costs	3,363,661	-	-	3,363,661
Net pension asset	162,406	28,036	10,460	200,902
Total other assets	6,785,487	378,919	750,496	7,914,902
Total assets	20,364,057	4,286,770	3,766,423	28,417,250
Deferred outflows of resources:				
Deferred amount on bond refundings	-	-	25,108	25,108
Pension deferrals	31,009	3,131	132	34,272
OPEB deferrals	2,290	395	148	2,833
Total deferred outflows of resources	33,299	3,526	25,388	62,213
	$ 20,397,356	$ 4,290,296	$ 3,791,811	$ 28,479,463

	Operating Fund	Courthouse Fund	Church Road System Fund	Total
LIABILITIES				
Current liabilities:				
Accounts payable and accrued expenses	$ 146,803	$ 12,475	$ 54,550	$ 213,828
Accrued interest payable	5,874	1,906	9,436	17,216
Bonds payable, current portion	191,000	192,000	215,000	598,000
Unearned connection fees	16,246	-	-	16,246
Total current liabilities	359,923	206,381	278,986	845,290
Current liabilities payable from restricted assets:				
Customer deposits	174,799	725	-	175,524
Long-term liabilities:				
Net OPEB liability	34,760	6,001	2,239	43,000
Bonds payable, less current portion	2,914,000	390,000	1,375,000	4,679,000
Total liabilities	3,483,482	603,107	1,656,225	5,742,814
Deferred inflows of resources:				
Pension deferrals	97,401	16,815	6,274	120,490
OPEB deferrals	4,042	698	260	5,000
Total deferred inflows of resources	101,443	17,513	6,534	125,490
Net position:				
Net investment in capital assets	8,964,978	3,071,185	956,476	12,992,639
Restricted	342,411	-	-	342,411
Unrestricted	7,505,042	598,491	1,172,576	9,276,109
Total net position	16,812,431	3,669,676	2,129,052	22,611,159
	$ 20,397,356	$ 4,290,296	$ 3,791,811	$ 28,479,463

Dinwiddie County Water Authority
Combining Statement of Revenues, Expenses and Changes in Net Position
Year Ended June 30, 2018

	Operating Fund	Courthouse Fund	Church Road System Fund	Total
Revenues:				
Operating revenues:				
Sewer charges	$ 1,565,965	$ 27,313	$ -	$ 1,593,278
Sale of water	1,122,294	-	598,315	1,720,609
County use and operation fees	-	244,038	-	244,038
Penalty and service charges	97,550	-	-	97,550
Fire hydrant rental	1,198	-	-	1,198
Miscellaneous	48,657	2,520	-	51,177
Total operating revenues	2,835,664	273,871	598,315	3,707,850
Operating expenses:				
Water, source of supply	353,669	-	171,246	524,915
Water, pumping	23,308	457	18,771	42,536
Water, transmission and distribution	107,930	-	500	108,430
Sewage, pumping	120,194	41,217	-	161,411
Sewage, treatment	792,729	76,720	-	869,449
Sewage, transmission and distribution	92,675	1,006	-	93,681
Maintenance shop	69,357	56,479	-	125,836
Customer accounts	260,303	13,777	3,529	277,609
Administrative	410,002	108,390	48,609	567,001
Total operating expenses, other than depreciation	2,230,167	298,046	242,655	2,770,868
Operating income (loss) before depreciation	605,497	(24,175)	355,660	936,982
Depreciation	(561,717)	(288,780)	(134,287)	(984,784)
Operating income (loss)	43,780	(312,955)	221,373	(47,802)
Nonoperating revenues (expenses):				
Interest earned	38,200	4,099	6,864	49,163
Contributions from the County	-	200,508	-	200,508
Economic development expenses	(35,561)	-	-	(35,561)
Service and connection fees	53,662	-	-	53,662
Interest expense	(73,299)	(8,878)	(45,937)	(128,114)
Total nonoperating revenues (expenses)	(16,998)	195,729	(39,073)	139,658
Income (loss) before transfers	26,782	(117,226)	182,300	91,856

	Operating Fund	Courthouse Fund	Church Road System Fund	Total
Transfers	$ (122,829)	$ 86,632	$ 36,197	$ -
Income (loss) before contributed capital	(96,047)	(30,594)	218,497	91,856
Contributed capital	1,855,492	-	-	1,855,492
Change in net position	1,759,445	(30,594)	218,497	1,947,348
Net position, beginning of year, as restated	15,052,986	3,700,270	1,910,555	20,663,811
Net position, end of year	$ 16,812,431	$ 3,669,676	$ 2,129,052	$ 22,611,159

Dinwiddie County Water Authority
Combining Statement of Cash Flows
Year Ended June 30, 2018

	Operating Fund	Courthouse Fund	Church Road System Fund	Total
Cash flows from operating activities:				
Cash receipts from customers	$ 2,744,258	$ 269,394	$ 593,401	$ 3,607,053
Cash receipts from other income	48,657	2,703	-	51,360
Cash payments to employees for services	(479,476)	(82,800)	(30,987)	(593,263)
Cash payments for water related services and supplies	(493,802)	(457)	(218,938)	(713,197)
Cash payments for sewage related services and supplies	(889,663)	(117,029)	-	(1,006,692)
Cash payments for shop maintenance expenses	(50,379)	(42,968)	-	(93,347)
Cash payments for customer accounts expenses	(99,633)	(9,450)	(2,378)	(111,461)
Cash payments for administrative expenses	(265,831)	(47,147)	(17,765)	(330,743)
Net cash provided (used) by operating activities	514,131	(27,754)	323,333	809,710
Cash flows from noncapital financing activities:				
Service and connection fees	53,662	-	-	53,662
Costs paid on behalf of School Board	-	(115,698)	-	(115,698)
Change in customer deposits	20,261	-	-	20,261
Net cash provided (used) by noncapital financing activities	73,923	(115,698)	-	(41,775)
Cash flows from capital and related financing activities:				
Acquisition and construction of capital assets	(114,153)	-	-	(114,153)
County contributions	-	200,508	-	200,508
Economic development costs paid	(85,947)	-	-	(85,947)
Interest paid	(73,650)	(9,504)	(39,975)	(123,129)
Principal retired	(186,000)	(191,000)	(210,000)	(587,000)
Net cash provided (used) by capital and related financing activities	(459,750)	4	(249,975)	(709,721)
Cash flows from investing activities:				
Transfers (to) from other funds	(122,525)	86,328	36,197	-
Interest received	38,200	4,099	6,864	49,163
Net cash provided (used) by investing activities	(84,325)	90,427	43,061	49,163
Net increase (decrease) in cash and cash equivalents	43,979	(53,021)	116,419	107,377
Cash and cash equivalents, beginning of year	4,044,846	531,717	998,316	5,574,879
Cash and cash equivalents, end of year	$ 4,088,825	$ 478,696	$ 1,114,735	$ 5,682,256

	Operating Fund	Courthouse Fund	Church Road System Fund	Total
Cash and cash equivalents, current assets	$ 312,195	$ 127,813	$ 374,699	$ 814,707
Cash and cash equivalents, restricted assets	517,210	-	-	517,210
Cash and cash equivalents, rate stabilization fund	615,383	-	-	615,383
Cash and cash equivalents, board designated	2,644,037	350,883	740,036	3,734,956
	$ 4,088,825	$ 478,696	$ 1,114,735	$ 5,682,256
Reconciliation of operating income (loss) to net cash provided by operating activities:				
Operating income (loss)	$ 43,780	$ (312,955)	$ 221,373	$ (47,802)
Adjustments to reconcile to net cash provided (used) by operating activities:				
Depreciation	561,717	288,780	134,287	984,784
Amortization	186,869	-	-	186,869
Change in assets and liabilities:				
Accounts receivable	(42,749)	(1,774)	(4,914)	(49,437)
Due from County	(146,378)	-	(20,409)	(166,787)
Prepaid expenses	11,545	5,225	5,225	21,995
Accounts payable and accrued expenses	(19,367)	4,326	(9,161)	(24,202)
Decrease in net pension asset/liabilitity and related deferred inflows/outflows of resources	(78,996)	(10,961)	(2,920)	(92,877)
Decrease in net OPEB liabilitity and related deferred inflows/outflows of resources	(2,290)	(395)	(148)	(2,833)
Net cash provided (used) by operating activities	$ 514,131	$ (27,754)	$ 323,333	$ 809,710
Supplemental disclosure of noncash financing and investing activities:				
Contributed capital	$ 1,855,492	$ -	$ -	$ 1,855,492

Dinwiddie County Water Authority
Schedule of Operating Expenses - Operating Fund
Year Ended June 30, 2018

	Water Source of Supply	Water Pumping	Water Transmission and Distribution	Sewage Pumping
Cost of sewage treatment	$ -	$ -	$ -	$ -
Salaries	-	1,646	29,263	20,855
Cost of purchased water	353,669	-	-	-
Repairs and maintenance	-	-	70,820	67,638
Amortization	-	-	-	-
Payroll taxes and fringe benefits	-	285	5,061	3,607
Supplies and tools	-	6,844	-	-
Utilities	-	14,533	808	23,224
Professional services	-	-	1,978	-
Office expense	-	-	-	-
Postage	-	-	-	-
Vehicle expense	-	-	-	-
Insurance	-	-	-	-
Telephone	-	-	-	4,870
Uniform rental	-	-	-	-
Payroll service	-	-	-	-
Dues and subscription	-	-	-	-
Bad debts	-	-	-	-
	$ 353,669	$ 23,308	$ 107,930	$ 120,194

Sewage Treatment	Sewage Transmission and Distribution	Maintenance Shop	Customer Accounts	Administrative	Total
$ 605,860	$ 37,929	$ -	$ -	$ -	$ 643,789
-	15,103	19,068	161,438	233,725	481,098
-	-	-	-	-	353,669
-	-	23,675	-	50,201	212,334
186,869	-	-	-	-	186,869
-	2,612	3,298	27,919	40,256	83,038
-	36,224	5,569	6,538	-	55,175
-	807	-	-	9,025	48,397
-	-	-	-	37,219	39,197
-	-	-	15,849	18,533	34,382
-	-	-	27,099	270	27,369
-	-	17,747	-	-	17,747
-	-	-	7,133	10,601	17,734
-	-	-	5,231	-	10,101
-	-	-	8,309	-	8,309
-	-	-	-	6,631	6,631
-	-	-	-	3,541	3,541
-	-	-	787	-	787
$ 792,729	$ 92,675	$ 69,357	$ 260,303	$ 410,002	$ 2,230,167

Dinwiddie County Water Authority
Schedule of Operating Expenses - Courthouse Fund
Year Ended June 30, 2018

	Water Pumping	Sewage Pumping	Sewage Treatment	Sewage Transmission and Distribution	Maintenance Shop	Customer Accounts	Administrative	Total
Salaries	$ -	$ 1,864	$ -	$ 50	$ 13,511	$ 4,327	$ 63,301	$ 83,053
Repairs and maintenance	-	-	51,932	-	11,118	-	-	63,050
Supplies and tools	457	29,080	5,986	936	264	543	-	37,266
Payroll taxes and fringe benefits	-	749	-	20	5,429	1,738	18,792	26,728
Utilities	-	5,737	-	-	21,357	-	-	27,094
Professional services	-	-	-	-	-	-	22,439	22,439
Cost of sewage treatment	-	-	15,003	-	-	-	-	15,003
Telephone	-	3,787	3,799	-	-	-	-	7,586
Insurance	-	-	-	-	-	2,378	3,634	6,012
Vehicle expense	-	-	-	-	4,800	-	-	4,800
Office expense	-	-	-	-	-	4,005	224	4,229
Uniform rental	-	-	-	-	-	786	-	786
	$ 457	$ 41,217	$ 76,720	$ 1,006	$ 56,479	$ 13,777	$ 108,390	$ 298,046

Dinwiddie County Water Authority
Schedule of Operating Expenses - Church Road System Fund
Year Ended June 30, 2018

	Water Source of Supply	Water Pumping	Water Transmission and Distribution	Customer Accounts	Administrative	Total
Cost of purchased water	$ 171,246	$ -	$ -	$ -	$ -	$ 171,246
Salaries	-	1,149	-	1,151	28,687	30,987
Utilities	-	12,014	-	-	-	12,014
Professional services	-	-	-	-	7,620	7,620
Supplies and tools	-	5,608	500	-	-	6,108
Insurance	-	-	-	2,378	3,634	6,012
Payroll taxes and fringe benefits	-	-	-	-	4,644	4,644
Office expense	-	-	-	-	4,024	4,024
	$ 171,246	$ 18,771	$ 500	$ 3,529	$ 48,609	$ 242,655

Compliance Report

DHG
DIXON HUGHES GOODMAN LLP

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

Board of Directors
Dinwiddie County Water Authority
Dinwiddie, 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 accompanying financial statements of the business-type activities of Dinwiddie County Water Authority as of and for the years ended June 30, 2018 and 2017, and the related notes to the financial statements, and have issued our report thereon dated October 9, 2018.

Internal Control over Financial Reporting

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

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or 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 over financial reporting that might be significant deficiencies or material weaknesses and therefore, material weaknesses or significant deficiencies may exist that were not identified. 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. We did identify certain deficiencies in internal control, described in the accompanying schedule of findings and responses that we consider to be a significant deficiency in internal control (see IC 18-001).

DIXON HUGHES GOODMAN LLP

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Dinwiddie County Water Authority'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*.

We noted certain other matters that we reported to the Board of Directors and management of Dinwiddie County Water Authority in a separate letter dated October 9, 2018.

Dinwiddie County Water Authority's Response to Findings

Dinwiddie County Water Authority's response to the findings identified in our audit is described in the accompanying schedule of findings and responses. Dinwiddie County Water Authority's response was not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on it.

Purpose of this Report

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

Dixon Hughes Goodman LLP

Chesterfield, Virginia
October 9, 2018

Schedule of Findings and Responses – Financial Statements

Finding No. IC 18-001

Comment	Management relies on the auditors to prepare financial statements and related disclosures that are compliant with generally accepted accounting principles (GAAP), and does not have a formal procedure to perform risk assessment on a regular basis.
Condition and Criteria	Auditors assist in the preparation of GAAP financial statements and footnotes. These are reviewed and approved by management; however, auditors feel that this review would only detect material misstatements, and that a misstatement that is more than inconsequential may not be prevented or detected. In addition, management does not have a formal procedure to analyze risks related to material misstatement of the financial statements. However, management and those charged with governance review financial information regularly and consult with auditors as needed regarding accounting issues.
Effect	Financial statements and related disclosures may be misstated by an amount that is more than inconsequential.
Cause	Due to the small size of the Authority, there is a limited accounting staff, which does not allow for the hiring of an accountant with the background needed to prepare GAAP compliant financial statements and related disclosures, or perform risk assessment on a regular basis.
Recommendation	Management will meet regularly with the auditors to keep up to date on changes in GAAP and continue to review the draft GAAP financial statements and related disclosures prior to issuance.
View of Management and Planned Corrective Action	Recommendations made by auditors will be implemented.