Henry County Public Service Authority

Comprehensive Annual Financial Report

Years Ended June 30, 2018 and 2017



# Table of Contents

Years Ended June 30, 2018 and 2017

		Pages
Independent A	Auditor's Report	i-ii
Management	's Discussion and Analysis	1-6
	FINANCIAL STATEMENTS	
Exhibits		
Α	Statements of Net Position	7
В	Statements of Revenues, Expenses, and Changes in Net Position	8
С	Statements of Cash Flows	9
D	Statements of Fiduciary Net Position	10
Notes to the F	Financial Statements	11-55
	REQUIRED SUPPLEMENTARY INFORMATION	
Schedule of C and Related F	Changes in the Political Subdivision's Net Pension Liability Ratios	56
Schedule of E	Employer Contributions	57
Notes to Req	uired Supplementary Information	58
	Employer's Share of Net OPEB Liability surance Program	59
Schedule of E	Employer Contributions – GLI OPEB	60
Notes to Req	uired Supplementary Information – GLI OPEB	61-62
Schedule of Cand Related F	Changes in the Political Subdivision's Net HIC OPEB Liability Ratios	63
Schedule of E	Employer Contributions – HIC OPEB	64
Notes to Req	uired Supplementary Information – HIC OPEB	65
	Changes in the Political Subdivision's Net OPEB Liability - h Insurance and Related Ratios	66
Schedule of E	Employer Contributions – OPEB Retiree Health Insurance	67

OTHER INFORMATION						
Tables						
1	Revenues by Source – Last Ten Fiscal Years	68				
2	Expenses by Function – Last Ten Fiscal Years	68				
3	Revenue Bond Debt Service Coverage – Last Ten Fiscal Years	69				
4	Schedule of Insurance in Force	70				
5	Raw Water Production by Source (In Million Gallons) – Last Ten Fiscal Years	71				
6	Waste Water Treatment by Plant (In Million Gallons) – Last Ten Fiscal Years	71				
7	Demographic Statistics – Last Ten Fiscal Years	72				
8	List of Ten Largest Customers	73				
9	Miscellaneous Statistical Data	74				
	COMPLIANCE					
on Compliance	uditor's Report on Internal Control Over Financial Reporting and and Other Matters Based on an Audit of Financial Statements ccordance with Government Auditing Standards	75-76				
	uditor's Report on Compliance for Each Major Program and on Internal ompliance Required by the Uniform Guidance	77-78				
Schedule of Ex	Schedule of Expenditures of Federal Awards 79					
Notes to Sched	lule of Expenditures of Federal Awards	80				
Schedule of Fir	Schedule of Findings and Questioned Costs 81					

**Pages** 



Robin B. Jones, CPA, CFP David V. Alga, CPA, CVA, CFF Denise C. Williams, CPA, CSEP Scott A. Thompson, CPA, CGMA Kimberly W. Jackson, CPA Nadine L. Chase, CPA Monique A. Lubick, CPA

Sherwood H. Creedle, Emeritus

Members of American Institute of Certified Public Accountants Virginia Society of Certified Public Accountants

# INDEPENDENT AUDITOR'S REPORT

To the Board of Directors
Henry County Public Service Authority

# **Report on the Financial Statements**

We have audited the accompanying financial statements of the business-type activities and fiduciary fund of the Henry County Public Service Authority, as of and for the years ended June 30, 2018 and 2017, and the related notes to the financial statements, which collectively comprise the Henry County Public Service Authority's basic financial statements as listed in the table of contents.

# Management's Responsibility for the Financial Statements

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

# Auditor's Responsibility

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

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

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

# **Opinions**

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

# **Other Matters**

# Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 1 through 6 and the schedule of changes in the political subdivision's net pension liability and related ratios, schedule of employer contributions, and notes to required supplementary information, schedule of employer's share of net OPEB liability group life insurance program, schedule of employer contributions - GLI OPEB, notes to required supplementary information - GLI OPEB, schedule of changes in the political subdivision's net HIC OPEB liability and related ratios, schedule of employer contributions - HIC OPEB, notes to required supplementary information - HIC OPEB, schedule of changes in political subdivision's net OPEB liability and related ratios - OPEB retiree health insurance, and schedule of employer contributions -OPEB retiree health insurance on pages 56 through 67 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

# Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Henry County Public Service Authority's basic financial statements. The statistical section is presented for purposes of additional analysis and is not a required part of the basic financial statements. The schedule of expenditures of federal awards is presented for purposes of additional analysis as required by Title 2 U.S. Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, and is also not a required part of the basic financial statements.

The schedule of expenditures of federal awards is the responsibility of management and was derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of expenditures of federal awards is fairly stated in all material respects in relation to the basic financial statements as a whole.

The statistical section has not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them

# Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated, November 2, 2018 on our consideration of the Henry County Public Service Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of Henry County Public Service Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Henry County Public Service Authority's internal control over financial reporting and compliance.

Crudu, John & Alga, P.C.
Creedle Jones & Alga, P.C.
Certified Public Accountants

South Hill, Virginia November 2, 2018

Management's Discussion and Analysis

As of June 30, 2018 and 2017

Our discussion and analysis of the Henry County Public Service Authority's financial performance provides an overview of the Authority's financial activities for the fiscal year ended June 30, 2018. Please read this information in conjunction with Henry County Public Service Authority's basic financial statements.

# **OVERVIEW OF THE FINANCIAL STATEMENTS**

The Henry County Public Service Authority (the "Authority") presents four basic financial statements. These are: (1) Statements of Net Position; (2) Statements of Revenues, Expenses, and Changes in Net Position; (3) Statements of Cash Flows; and (4) Statements of Fiduciary Net Position.

Our financial position is measured in terms of resources (assets) we own and obligations (liabilities) we owe on a given date. This information is reported on the Statements of Net Position, which reflects the Authority's assets in relation to its debt to creditors. The excess of our assets over liabilities is our equity, or net position.

Information regarding the results of our operation during the years is reported in the Statements of Revenues, Expenses, and Changes in Net Position. These statements show how much our overall net position increased or decreased during the years as a result of our operations and for other reasons.

Our Statements of Cash Flows disclose the flow of cash resources into and out of the Authority during the years and how we applied those funds.

# SUMMARY OF ORGANIZATION AND BUSINESS

The Henry County Public Service Authority is a public body organized and created under the Virginia Water and Waste Authorities Act of the Code of Virginia of 1950 as amended. The Henry County Board of Supervisors created the Authority in 1965. The purpose of the Authority is to "acquire, construct, improve, extend, operate, and maintain a water and sewage disposal system."

The Authority is governed by six citizen members appointed by the Henry County Board of Supervisors to four-year staggered terms.

In 1974, the Authority and neighboring City of Martinsville (the "City") signed a service agreement in which the Authority would purchase sewage treatment from the City. In 1982, the Authority signed a service agreement with the City to purchase water treatment from the City. These agreements require the Authority to share in the annual operating costs of the plants in proportion to its actual use as measured by the volume of water used and sewage it contributed. It also allowed for the Authority to purchase capacity rights into the water and sewer plants at an agreed-upon price.

The Authority has constructed water lines which allows the Philpott Water Treatment Plant to furnish water to the 220 South and 58 East areas and has significantly reduced water purchased from the City of Martinsville, Virginia. The Authority can produce the water at a lower cost.

The Authority's infrastructure assets consist of one water treatment plant, approximately 372 miles of water lines and 244 miles of interceptor sewers, and several pump stations. The collection system, consisting of mains and laterals, is owned and maintained by the Authority. The last remaining waste water plant was converted to a pumping station and was completed in December 2005 and all waste water is now treated by the City of Martinsville.

The Authority has no taxing power. The revenues of the Authority are derived from water and sewage disposal charges based on metered and unmetered water consumption of the Authority's users of the system.

# **FINANCIAL SUMMARY**

# Financial Position

A summary of the Authority's Statements of Net Position for 2018 and 2017 is presented below:

	<u>2018</u>	2017 ( <u>(Restated)</u>	\$ Change	% Change
Current Assets	\$13,550,265	\$11,268,328	\$ 2,281,937	20.25%
Net Capital Assets	66,581,536	68,593,909	(2,012,373)	-2.93%
Other Noncurrent Assets	8,126,469	7,998,229	128,240	1.60%
Total Assets	88,258,270	87,860,466	397,804	0.45%
Deferred Outflows of Resources	514,039	859,367	(345,328)	-40.18%
Total Assets and Deferred Outflows of Resources	<u>\$88,772,309</u>	\$88,719,833	\$ 52,476	0.06%
Total Liabilities	\$21,765,259	\$23,754,505	\$ (1,989,246)	-8.37%
Deferred Inflows of Resources	349,936	97,840	252,096	257.66%
Net Position				
Net investment in capital assets	49,213,955	49,454,615	(240,660)	-0.49%
Restricted for debt	8,126,469	7,998,229	128,240	1.60%
Unrestricted	9,316,690	7,414,644	1,902,046	25.65%
Total Net Position	66,657,114	64,867,488	1,789,626	2.76%
Total Liabilities, Deferred Inflows of Resources,				
and Net Position	\$88,772,309	\$88,719,833	\$ 52,476	0.06%

# Change in Net Position

A summary of the Authority's Statements of Revenues, Expenses, and Changes in Net Position for 2018 and 2017 is presented below:

# Condensed Statements of Revenues, Expenses, and Changes in Net Position

	<u>2018</u>	<u>2017</u>		\$ Change	<u>% Change</u>
Operating Revenues	\$12,940,485	\$ 13,034,314	\$	(93,829)	-0.72%
Operating Expenses	(10,435,223)	 (10,230,645)	_	(204,578)	2.00%
Operating Income	2,505,262	2,803,669		(298,407)	-10.64%
Interest Income	378,726	340,012		38,714	11.39%
Gain on Sale of Properties	15,995	2,019		13,976	692.22%
Transfer to Henry County IDA	(1,111,279)	-		(1,111,279)	0.00%
Nonoperating Expense	(676,436)	 (833,701)		157,265	-18.86%
Income Before Contributions	1,112,268	2,311,999		(1,199,731)	-51.89%
Capital Contributions	677,358	 896,386		(219,028)	-24.43%
Changes in Net Position	\$ 1,789,626	\$ 3,208,385	\$	(1,418,759)	-44.22%

During the year, the Authority's net operating income was \$2,505,262. The Authority had nonoperating revenues in the form of interest income and gain on sale of assets, which amounted to \$394,721 and nonoperating expenses in the form of interest expense amounting to \$676,436 and assets constructed in the amount of \$1,111,279 that were transferred to the Henry County IDA. Operating expenses of \$10,435,223 included all expenses necessary to operate the Authority's water and sewer facilities.

Net position increased \$1,789,626 in 2018 as compared to an increase of \$3,208,385 in 2017.

# **Cash Flows**

A summary of the Authority's Statements of Cash Flows for 2018 and 2017 is presented below:

# **Condensed Statements of Cash Flows**

	<u>2018</u>	<u>2017</u>
Cash Provided by (Used in)		
Operating activities	\$ 6,192,305	\$ 5,381,246
Capital and related financing activities	(4,061,268)	(4,953,848)
Investing activities	266,481	171,484
Net Increase in Cash	\$ 2,397,518	\$ 598,882

Cash flows from capital and related financing activities consist of purchases of fixed assets and payments related to debt.

Cash flows from operating activities consist of receipts from customers and grants less operating expenses, creating a positive cash flow.

During fiscal year 2018, there was an increase of \$2,397,518 in cash as compared to an increase of \$598,882 in 2017.

# Capital Assets

As of June 30, 2018, the Authority's net capital assets total \$66,581,536 which represents a net decrease of \$2,012,373 or 2.9% over the previous fiscal year.

# **Change in Capital Assets**

			Net Additions and Deletions		Ju	Balance ine 30, 2018
Land and land improvements	\$	592,359	\$	-	\$	592,359
Construction in progress		2,448,159		752,513		3,200,672
Building and leasehold improvements		2,994,575		-		2,994,575
Water and sewer system	13	3,786,383		166,804		133,953,187
Trucks and autos		2,049,320		165,890		2,215,210
Office equipment		91,709		_		91,709
Total Capital Assets	14	1,962,505		1,085,207		143,047,712
Less: Accumulated depreciation	(7	3,368,596)		(3,097,580)		(76,466,176)
Total Capital Assets, Net	\$ 6	8,593,909	\$	(2,012,373)	\$	66,581,536

# Long-Term Debt

As of June 30, 2018, the Authority's long-term debt totals \$17,755,057.

The Authority's long-term debt is presented as follows:

# **Change in Long-Term Debt**

			 t Additions d Deletions	<u>Ju</u>	Balance ne 30, 2018
Long-term notes and bonds Compensated absences	\$	19,139,294 356,635	\$ (1,771,713) 30,841	\$	17,367,581 387,476
	\$	19,495,929	\$ (1,740,872)	\$	17,755,057
Refunding on debt	\$	133,661	\$ (44,780)	\$	88,881

# **GENERAL TRENDS AND SIGNIFICANT EVENTS**

The Authority's service area in Henry County has the potential for growth. The County is over two hundred years old and has available land that continues to be developed. Growth from new development is not expected to significantly increase the Authority's water and sewage disposal revenues in any given year.

In 2011 and 2012, Henry County secured grants and other funding in the amount of \$4,373,000 to expand water and sewer to and within its newest industrial park, Commonwealth Crossing Business Center. Construction to the Park for water and sewer was completed and remaining funds were used for water and sewer infrastructure in the Park. At the end of fiscal year 2014, the County obtained the environmental permit from the Army Corps of Engineers allowing for grading and development of this Park. Grading commenced in fiscal year 2015 and was completed in fiscal year 2018. This industrial park is being marketed by the County's economic development officials. In July 2018 Press Glass, Inc., the largest independent flat glass processing operation in Europe, announced it will be the first industry to locate at this park and will invest \$43 million to establish a manufacturing operation.

In fiscal years 2014 and 2015, the Authority was approved for a \$2,400,570 zero percent loan from the Virginia Department of Environmental Quality (financed through Virginia Resources Authority) to run a sewer line to the Grassy Creek community. The loan, Series 2015B, was closed in December 2015 followed by project construction which was completed in fiscal year 2017. The new line allowed for two lagoon systems, Carver and Greenbriar, to be taken off-line and the sewage to be treated by the City of Martinsville.

In fiscal years 2014 and 2015, the Authority was approved by the Virginia Department of Health (VDH) for a \$1,189,280 low interest loan (financed through Virginia Resources Authority) and a \$297,320 grant to construct a water line to the Pleasant Grove community. This loan, Series 2015C, was closed in December 2015 followed by project construction which was completed in fiscal year 2017. This area had been serviced by a well system and with the new water line the well system was taken off-line and water provided by the Authority's Philpott water system.

In fiscal years 2014 and 2015, the Authority received a Virginia Department of Health (VDH) planning grant to study water line extensions for the Eastwood and Sandy Level community. The Eastwood community had been serviced through a well system and the Authority purchased water from the City of Eden, North Carolina for the Sandy Level community. The results of the study indicated the best path forward was to construct water line extensions to connect this area to the Authority's Philpott water system. The Virginia Department of Health (VDH) approved a low interest loan (financed through Virginia Resources Authority) in the amount of \$1,293,500 and a grant of \$100,000 to construct the new line. This loan, Series 2015D, was closed in December 2015 followed by project construction which was completed in fiscal year 2017. The new line removed the need to purchase water from the City of Eden and took the well out of service.

In fiscal year 2016, the Authority was approved by the Virginia Department of Health (VDH) for a \$621,200 loan (financed through Virginia Resources Authority) at an interest rate of 2.65% for 30 years and a grant for \$185,000 to construct a water line in the Oak Level community on Reed Creek Drive. This line would allow the Authority to shut down a well system serving this area that has had water quality issues. This loan, Series 2018A, was closed in March 2018. The project is scheduled to be completed in the Fall of 2018.

Due to current water consumption and to position the Authority for future growth, the Authority applied for and received approval to increase its permitted water withdrawal from the Smith River and also the expansion of its water treatment plant to allow for increased capacity from 4 million gallons per day to 6 million gallons per day. In fiscal year 2016 the Authority received a funding offer from the Virginia Department of Health for a low interest loan (financed through the Virginia Resources Authority) in the amount of \$14,500,000 to upgrade the Philpott water treatment plant. This loan, Series 2018B, was closed in June 2018 with an interest rate of 2.50%. The project construction began in July 2018 with an estimated completion date at the end of fiscal year 2020.

To position the Authority for future growth and to control future cost the Authority has decided reopen its Lower Smith River plant as a waste water treatment facility. This plant previously operated as a waste water treatment facility before being converted to a pump station over a decade ago. The Authority is working with engineers to design the facility and has a preliminary loan offer from the Virginia Department of Environmental Quality in the amount of \$23,659,400 contingent on receiving a favorable financial report and recommendation from the Virginia Resources Authority. Actual construction is not anticipated to start until fiscal year 2020.

# **FINANCIAL CONDITION**

The Authority's financial condition remained good at year end with adequate liquid assets and a reasonable level of unrestricted net position. The current financial condition, staff capabilities, operating plans, and upgrade plans to meet future water quality requirements are well balanced and under control.

Total assets and deferred outflows of resources increased by \$52,476, less than 1%, while net position increased by \$1,789,626 or 2.8%. Accounts receivable, net at year end was \$1,268,793 compared to \$1,279,687 for fiscal year 2017. The reserve for bad debts equals all accounts over 90 days past due. The bad debt charge for 2018 and 2017 was \$49,807 and \$47,903, respectively. Recovery of bad debts previously written off amounted to \$3,550 and \$6,348 in 2018 and 2017, respectively.

# **RESULTS OF OPERATIONS**

The Authority's main revenues fall into the categories of operating revenues, interest income, and capital contributions. Revenues, including capital contributions, totaled \$14,012,564 compared to \$14,272,731 last year, a 1.8% decrease.

# **DEBT**

At year end, the Authority had \$17,233,374 in long-term debt with \$3,872,750 (before deferrals, OPEB, and compensated absences) coming due in 2019. More detailed information about the Authority's long-term debt is presented in Note 7 to the financial statements.

One area that demonstrates the Authority's financial ability to pay current debt service (principal and interest) is seen in its debt service coverage, which is shown below. The financing agreement covenant requires the Authority to establish rates, fees, and other charges for the use of and for services furnished by the Authority and collection procedures so that in each fiscal year net revenues and available cash reserves are not less than 1.2 times the debt service (principal and interest) for the fiscal year. Cash reserves available were \$11.54 million for 2018 and \$9.14 million for 2017. The following table calculates debt service coverage for fiscal years 2018 and 2017, including the available cash reserves:

	(In Millions of Dollars) 2018 2017				% Change
Unrestricted operating revenue Unrestricted investment income	\$ 1	12.94 0.40	\$	13.04 0.34	-0.8% 17.6%
Total revenue Total operating expenses (less depreciation)	1	13.34 7.22		13.38 7.10	-0.3% 1.7%
Net revenue Unrestricted cash - beginning of year		6.12 9.14		6.28 8.54	-2.5% 7.0%
Available for Debt Service	<b>\$</b> 1	15.26	\$	14.82	3.0%
Annual Debt Service	\$	4.36	\$	4.22	3.3%
Debt Service Coverage		3.50		3.52	-0.6%

# **FINAL COMMENTS**

Fiscal year 2018 continued the trend of positive financial performance by the Authority. This positive performance is needed in order for the Authority to maintain flexibility in future borrowing decisions, ensuring that there is an appropriate reserve for operating expenses, expansion, and that resources are available to provide for the effects of time and usage on the significant investment in equipment.

# **REQUESTS FOR INFORMATION**

This financial report is designed to provide our citizens, taxpayers, customers, investors, and creditors with a general overview of the Authority's finances and to demonstrate the Authority's accountability for the money it receives. Questions concerning this report or requests for additional information should be directed to the General Manager, Henry County Public Service Authority, P. O. Box 69, Collinsville, Virginia 24078, telephone 276-634-4600.

# **FINANCIAL STATEMENTS**

Statements of Net Position June 30, 2018 and 2017

June 30, 2018 and 2017		
	<u>2018</u>	<u>2017</u>
Assets and Deferred Outflows of Resources	3	
Current Assets		
Cash and cash equivalents	\$ 11,540,550	
Accounts receivable, net	1,268,793	1,279,687
Unbilled revenue	486,869	475,285
Inventory	254,053	370,324
Total Current Assets	13,550,265	11,268,328
Capital Assets		
Nondepreciable	3,793,031	3,040,518
Depreciable	62,788,505	65,553,391
Total Capital Assets	66,581,536	68,593,909
Other Noncurrent Assets		
Restricted investments	8,126,469	7,998,229
Total Other Noncurrent Assets	8,126,469	7,998,229
Total Assets Deferred Outflows of Resources	88,258,270	87,860,466
	200 504	700 700
Deferred outflows - pension	380,581	706,723
Deferred Outflows - OPEB	05.004	
Retiree health insurance	25,224	-
VRS health insurance credit	7,222	7,090
VRS group life	12,131	11,893
Refunding of debt	88,881	133,661
Total Deferred Outflows of Resources	514,039	859,367
Total Assets and Deferred Outflows of Resources	\$ 88,772,309	\$ 88,719,833
Liabilities, Deferred Inflows of Resources, and Net		
Liabilities		
Current Liabilities		
Accounts payable	\$ 816,270	\$ 485,720
Interest payable	104,919	127,191
Accrued expenses and payables	36,114	36,009
Customer deposits	819,513	787,614
Current portion of compensated absences	38,748	35,663
Current maturities of long-term liabilities	3,903,993	3,727,509
Total Current Liabilities	5,719,557	5,199,706
Long-Term Liabilities	3,7 13,337	3,199,700
Due to other governments - Pittsylvania County	983,298	1,009,754
OPEB Liabilities	903,290	1,009,734
Net retiree health insurance	286,911	299,251
Net VRS health credit		
	83,363	89,493
Net VRS group life	187,000	220,000
Net VRS pension liability	692,814	1,203,544
Compensated absences, net of current portion	348,728	320,972
Notes payable, net of current portion	13,463,588	15,411,785
Total Long-Term Liabilities	16,045,702	18,554,799
Total Liabilities	21,765,259	23,754,505
Deferred Inflows of Resources		
Deferred Inflows - OPEB		
VRS health insurance credit	5,890	-
VRS group life	21,000	-
Deferred inflows - VRS pension	323,046	97,840
Total Deferred Inflows of Resources	349,936	97,840
Net Position		
Net investment in capital assets	49,213,955	49,454,615
Restricted		
Debt covenants	8,126,469	7,998,229
Unrestricted	9,316,690	7,414,644
Total Net Position	66,657,114	64,867,488
Total Liabilities, Deferred Inflows of Resources, and Net Position	\$ 88,772,309	\$ 88,719,833
The accompanying notes to the financial statements are an integral p		
The accompanying notes to the illiancial statements are all integral p	Jan or timo state	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

# Statements of Revenues, Expenses, and Changes in Net Position

Years Ended June 30, 2018 and 2017

		<u>2018</u>		<u>2017</u>
Operating Revenues Water and sewer charges	\$	42 0CE 722	<b>ተ</b>	10 100 000
Fire protection fees - Henry County	Ф	12,065,732 406,800	\$	12,199,230 406,800
Connection fees		68,000		46,292
Miscellaneous		399,953		381,992
Wildowalioud		000,000	_	001,002
Total Operating Revenues		12,940,485		13,034,314
Operating Expenses				
Water and sewer treatment		3,071,162		3,114,831
Depreciation		3,218,463		3,131,080
Maintenance - transmission and collection lines		1,504,017		1,303,816
Administration		1,121,527		1,187,627
Bad debts		49,807		47,903
Customer service Engineering and mapping		477,995 321,179		436,518 362,299
Maintenance - vehicle and equipment		193,185		135,588
Management information systems		197,184		237,323
Meter reading		161,535		162,638
Service center		43,219		38,463
Safety		75,950	_	72,559
Total Operating Expenses		10,435,223		10,230,645
Operating Income		2,505,262		2,803,669
Non-Operating Revenues (Expenses)				
Interest income		378,726		340,012
Gain on sale of properties		15,995		2,019
Assets transferred to Henry County IDA		(1,111,279)		-
Interest expense and bond costs		(676,436)		(833,701)
Net Non-Operating Revenues (Expenses)		(1,392,994)		(491,670)
Change in Net Position Before Contributions		1,112,268		2,311,999
Capital Contributions				
Federal grants		586,248		33,817
Other		91,110		862,569
Total Capital Contributions	_	677,358	_	<u>896,386</u>
Change in Net Position		1,789,626		3,208,385
Total Net Position - Beginning of Year (Restated)		64,867,488		62,255,829
Restatement of OPEB Accounts		<u>-</u>	_	(596,726)
Total Net Position - End of Year	\$	66,657,114	\$	64,867,488

The accompanying notes to the financial statements are an integral part of this statement.

# Statements of Cash Flows

Years Ended June 30, 2018 and 2017

		<u>2018</u>		<u>2017</u>
Cash Flows from Operating Activities	•	42.074.60E	ው	12 002 702
Cash received from customers	\$	12,971,695	Ф	13,003,783
Cash paid for goods and services  Cash paid to employees and fringes		(3,426,573)		(4,378,993)
	_	(3,352,817)		(3,243,544)
Net Cash Provided by Operating Activities		6,192,305		5,381,246
Cash Flows from Capital and Related Financing Activities		677 250		006 206
Governmental grant revenue		677,358		896,386
Due to Pittsylvania County Purchase of capital assets		(26,456) (1,206,090)		(23,384) (2,783,203)
Fixed assets transferred to Henry County IDA		(1,200,090)		(2,765,205)
Disposal of fixed assets		(1,111,273)		6,200
Compensated absences		30,841		(27,772)
Bond proceeds		1,960,412		1,221,670
Bond principal payments		(3,732,125)		(3,450,285)
Bond interest payments (includes debt refunding)		(653,929)		(793,460)
Net Cash Used in Capital and Related				
Financing Activities		(4,061,268)		(4,953,848)
·		(1,001,000)		(1,000,010)
Cash Flows from Investing Activities		070 700		0.40.040
Interest received		378,726		340,012
Gain on sale of properties		15,995		2,019
Net change in investments	_	(128,240)		(170,547)
Net Cash Provided by Investing Activities		266,481		171,484
Net Increase in Cash and Cash Equivalents		2,397,518		598,882
Cash and Cash Equivalents - Beginning of Year	_	9,143,032		8,544,150
Cash and Cash Equivalents - End of Year	\$	11,540,550	\$	9,143,032
Reconciliation of Operating Income to Net Cash Provided				
by Operating Activities			_	
Operating income	\$	2,505,262	\$	2,803,669
Adjustments to reconcile operating income		2 240 462		2 424 000
Depreciation Bad debts		3,218,463		3,131,080
Change in assets and liabilities		49,807		47,903
Decrease (Increase) in				
Accounts receivable		(38,913)		(109,998)
Inventory		116,271		(213,196)
Deferred outflows - VRS OPEB group life		(238)		(210,100)
Deferred outflows - VRS OPEB health insurance credit		(132)		_
Deferred outflows - OPEB retiree health insurance		(25,224)		-
Deferred outflows - pension		326,142		(111,873)
Unbilled revenue		(11,584)		1,712
Increase (Decrease) in				
Accounts payable		330,551		(406,697)
Net VRS OPEB group life		(33,000)		-
Net VRS OPEB health insurance credit		(6,130)		-
Net OPEB retiree health insurance		(12,340)		(7,439)
Deferred inflows - VRS OPEB group life		21,000		-
Deferred inflows - VRS OPEB health insurance credit		5,890		<u>-</u>
Net pension liability		(510,730)		398,888
Deferred inflows - pension		225,206		(171,522)
Customer deposits		31,899		29,852
Accrued expenses	<u></u>	105 6 402 305	Φ.	(11,133)
Net Cash Provided by Operating Activities  The accompanying notes to the financial statements are an	\$ inte	6,192,305	<u>\$_</u> his	5,381,246 statement
The accompanying notes to the illiandal statements are all	11110	zgrai part Urt	1115	siaitiiitiii.

# Statements of Fiduciary Net Position

As of June 30, 2018 and 2017

	2018 OPEB Trust Fund			2017 OPEB Trust Fund		
Assets						
Investment - restricted	\$	161,560	\$	136,336		
Total Assets	\$	161,560	\$	136,336		
Liabilities and Net Position Liabilities	\$		\$			
Liabilities	Ф	-	Ф	-		
Net Position						
Restricted for OPEB		161,560		136,336		
Total Liabilities and						
Net Position	\$	161,560	\$	136,336		

The accompanying notes to the financial statements are an integral part of this statement.

Notes to the Financial Statements

Year Ended June 30, 2018

# Organization, Description of the Entity, and Its Activities

The Henry County Public Service Authority (the "Authority") was formed in 1965 under the provisions of the Virginia Water and Sewer Authorities Act, Code of Virginia (1950), as amended. The Authority provides water and sewer services to communities in Henry County, Virginia (the "County"). The Authority is governed by a six-member Board of Directors who are appointed for four-year staggered terms by the Board of Supervisors of the County. Since the Board of Supervisors cannot impose its will on the Authority and since there is no potential financial benefit or burden in the relationship, the County is not financially accountable for the Authority. Accordingly, the Authority is not considered a component unit of the County.

# 2 Significant Accounting Policies

# Financial Statement Presentation

The financial statements of the Henry County Public Service Authority have been prepared in conformity with the specifications promulgated by the Auditor of Public Accounts (APA) of the Commonwealth of Virginia, and the accounting principles generally accepted in the United States as specified by the Governmental Accounting Standards Board. The more significant of the Authority's accounting policies are described below:

# Basis of Accounting

The Authority's financial statements are reported using the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows.

Private-sector standards of accounting and financial reporting issued prior to December 1, 1989, generally are followed in the Authority's financial statements to the extent that those standards do not conflict with or contradict guidance of the Governmental Accounting Standards Board. The Authority also has the option of following subsequent private-sector guidance, subject to this same limitation. The Authority has elected not to follow subsequent private-sector guidance.

The Authority distinguishes operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services in connection with the Authority's principal ongoing operations. The principal operating revenues of the Authority are charges to customers for water and sewer sales. Operating expenses include the cost of water and sewer treatment, maintenance, and administrative expenses. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

# Cash and Cash Equivalents

Cash and cash equivalents consists of cash on hand; demand, savings, or money market accounts; and certificates of deposit or short-term investments with purchased maturities of three months or less.

# **Unbilled Revenue**

Unbilled revenue consists of amounts earned as of year-end, but not yet billed because billing dates do not coincide with year-end.

# Allowance for Doubtful Accounts

The Authority has calculated its allowance for doubtful accounts using historical collection data and specific account analysis of all accounts greater than or equal to ninety days aged.

# Inventory

Inventory consists of grinder pumps, parts, and supplies on hand at year end, reported at the lower of cost (first-in, first-out) or market. Inventory is generally used for construction and for operation and maintenance work, and is not held for resale.

# Capital Assets

Capital assets are recorded at original cost at the time of acquisition. Donated assets are recorded at their fair market value on the date donated. Repair and maintenance items are expensed when incurred. Depreciation is provided on the straight-line method over the following estimated useful lives:

Buildings and structures	40-50 years
Sewer system equipment	10-50 years
Water system equipment	10-40 years
Other equipment	5-20 years

# Compensated Absences

The vacation policy provides for the accumulation of earned vacation leave, depending on years of service with a maximum accumulation of 240 hours. The sick leave policy provides for sick leave to be earned at the rate of eight hours per month of service with a maximum accumulation of 720 hours. Accumulated vacation is paid at 100 percent, and sick leave is paid at 25 percent, upon termination of employment. These amounts are accrued when incurred.

# **Pensions**

The Virginia Retirement System (VRS) Political Subdivision Retirement Plan is a multiemployer, agent plan. For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the 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 Postemployment Benefits Plan

For purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the County of Henry's OPEB Plan for Retiree's Health Insurance and additions to/deductions from the Plan's fiduciary net position have been determined on the same basis as they are reported by the Plan. See Notes to the financial statement for more information regarding the Plan.

# **Group Life Insurance**

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 Program OPEB liability, deferred outflows of resources and deferred inflows of resources related to the Group Life Insurance Program OPEB, and Group Life Insurance Program OPEB expense, information about the fiduciary net position of the 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.

# Health Insurance Credit Program

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

# Revenues

The Authority records water and sewer revenues as billed to its customers principally on a monthly basis. Fees charged for the privilege of connecting to the system are credited to income.

# **Property and Equipment**

Depreciation is provided principally on the straight-line method over the estimated useful lives of the assets.

# Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

# **Budgets**

The Authority adopts an annual budget for informative and fiscal planning purposes only. The budget is not intended to be a legal control on expenses. Budgets are adopted on the accrual basis of accounting with the exception that depreciation and amortization are not budgeted.

# **Amortization**

Bond premiums and discounts are deferred and amortized over the life of the bonds using the effective interest method. Amortization of bond premiums or discounts is included in interest expense. Bonds payable are reported net of the applicable bond premium or discount. The deferred amount resulting from bond refunding is amortized over the shorter of the life of the new bond issue or the refunded issue.

# **Net Position**

Net position is the difference between assets and liabilities. Net position invested in capital assets represent capital assets, less accumulated depreciation, less any outstanding debt related to the acquisition, construction, or improvement of those assets.

# **Deferred Outflows/Inflows of Resources**

In addition to assets, the Statement of Financial Position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position that applies to a future period(s) and so will not be recognized as an outflow of resources until then.

In addition to liabilities, the Statement of Financial Position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position that applies to a future period(s) and so will not be recognized as an inflow of resources until that time.

# Adoption of New GASB Statement

During the fiscal year ended June 30, 2018, the Authority adopted the following GASB statement:

 Statement No. 75, "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions

# 3 Cash Equivalents

# **Deposits**

All cash of the Authority is maintained in accounts collateralized in accordance with the Virginia Security for Public Deposits Act, Section 2.2-4400 et seq. of the Code of Virginia or covered by Federal Depository Insurance.

# Investments

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, bankers acceptances, repurchase agreements, and the State Treasurer's Local Government Investment Pool (LGIP). Investments are carried at fair value.

lnv	estment Type	<u>Fair Value</u>	<u>Maturity</u>	Moody's <u>Rating</u>
U.S. Treasu Certificates		\$6,060,364 2,066,105	5 months or less 2021	AAA N/A
		\$8,126,469		

*Interest Rate Risk* – As a means of limiting its exposure to fair value losses arising from rising interest rates, the Authority purchases investments having a maturity not greater than five years from the date of purchase.

**Credit Risk** – In accordance with State statutes, the Authority authorized investments in obligations of the United States and agencies thereof, commercial paper, repurchase agreements which are collateralized with securities that are approved for direct investment, and LGIP.

**Concentration of Credit Risk** – The Authority places no limit on the amount that may be invested in any one issuer. More than 20 percent of the Authority's investments are in certificates of deposit from a single bank.

# **Debt Service Forward Delivery Agreements**

The Authority entered into two Debt Service Forward Delivery Agreements dated May 10, 2002 (one for the Debt Service Fund and one for the Debt Service Reserve Fund) maturing November 15, 2019. Monthly, the Authority transfers cash to the bond trustee in exchange for U.S. Treasury obligations which are held by the bond trustee. These obligations mature in accordance with the debt service payment schedule.

# Amount of Allowance for Uncollectible Accounts

The Authority calculates its allowance for uncollectible accounts using historical collection data and, in certain cases, specific account analysis. Management estimates the allowance account to be \$48,914 and \$48,233 as of June 30, 2018 and 2017, respectively.

# 5 Due to Other Governments

The Authority has entered into a long-term agreement with Pittsylvania County concerning the construction of water lines. The agreement allows the Authority to repay Pittsylvania County for the cost of these lines based on water usage by the County. The original contract amount was \$1,250,000. The amount repaid for fiscal year 2018 was \$26,456 leaving a balance of \$983,298 as of June 30, 2018.

The remainder of this page is left blank intentionally.

# 6<sup>Capital Assets</sup>

The following schedule shows the breakdown of capital assets by category at June 30, 2018:

	<b>Balance</b>	<b>Acquired</b>	Disposed	Balance
	July 1, 2017	(Increased)	(Decreased)	June 30, 2018
Capital assets, not depreciated				
Land and land improvements	\$ 592,359	\$ -	\$ -	\$ 592,359
Construction in Progress				
Water	2,164,100	1,504,616	1,401,070	2,267,646
Sewer	284,059	814,273	165,306	933,026
Total Construction in Progress	2,448,159	2,318,889	1,566,376	3,200,672
_				
Total Capital Assets, Not				
Depreciated	3,040,518	2,318,889	1,566,376	3,793,031
1	-,,	,,	, , -	-,,
Capital assets, depreciated				
Buildings and leasehold improvements	2,994,575	_	_	2,994,575
Water and sewer system	133,786,383	205,251	38,447	133,953,187
Trucks and autos	2,049,320	248,326	82,436	2,215,210
Office equipment	91,709	, -	, -	91,709
• •				
Total Capital Assets,				
Depreciated	138,921,987	453,577	120,883	139,254,681
	,	,	,	,,
Less: Accumulated depreciation for				
Land improvements	2,738	89	_	2,827
Buildings and leasehold improvements	2,255,441	69,994	-	2,325,435
Water and sewer system	69,337,551	3,023,625	38,447	72,322,729
Trucks and autos	1,681,157	124,755	82,436	1,723,476
Office equipment	91,709	, -	-	91,709
• •				
Total Accumulated Depreciation	73,368,596	3,218,463	120,883	76,466,176
rotar room and poprooration				
Total Capital Assets				
Depreciated, Net	65,553,391	(2,764,886)	_	62,788,505
Dopiociated, 146t	00,000,001	(2,104,000)		02,700,303
Total Capital Assets, Net	\$68,593,909	\$ (445,997)	\$ 1,566,376	\$ 66,581,536
Total Capital Assets, Net	Ψ 00,030,309	ψ (++3,331)	ψ 1,000,070	Ψ 00,301,330

**7**Long-Term Debt

The following is a summary of the Authority's long-term liability activity for the year:

Details of Long-Term Indebtedness	Balance July 1, 2017	Increase	Decrease	Balance June 30, 2018	Due Within One Year
2000 VRL Fund	\$ 68,720	\$ -	\$ 29,700	\$ 39,020	\$ 29,700
2001 Water and Sewer Refunding	10,070,000	-	3,175,000	6,895,000	3,355,000
2007 Bonds Payable	1,675,558	-	131,654	1,543,904	136,895
2015 VRA Bond	1,420,000	-	90,000	1,330,000	95,000
2015A VRA Bond	1,625,018	-	73,168	1,551,850	74,676
2015B VRA Bond	2,340,556	-	124,645	2,215,911	120,029
2015C VRA Bond	1,189,280	-	28,783	1,160,497	29,435
2015D VRA Bond	1,293,500	-	31,306	1,262,194	32,015
2018A VRA Bond	-	621,200	-	621,200	-
2018B VRA Bond (not fully disbursed)		14,500,000		14,500,000	
Subtotal	19,682,632	15,121,200	3,684,256	31,119,576	3,872,750
Less: Loan funds not disbursed					
2015B VRA Bond	(725,414)	-	(725,414)	-	-
VRA Series 2018A Bond	-	(254,142)	-	(254,142)	-
VRA Series 2018B Bond		(13,632,060)		(13,632,060)	
	(725,414)	(13,886,202)	(725,414)	(13,886,202)	
Long-Term Debt before Deferrals	18,957,218	1,234,998	2,958,842	17,233,374	3,872,750
Deferred Amounts					
Imputed interest on 2000 VRL Fund Unamortized premium on 2001	(4,617)	-	(2,874)	(1,743)	(1,516)
Water and Sewer Refunding Unamortized premium on	50,959	-	33,993	16,966	16,966
2015 VRA Bond	135,734		16,750	118,984	15,793
	182,076		47,869	134,207	31,243
Long-Term Debt	19,139,294	1,234,998	3,006,711	17,367,581	3,903,993
Compensated absences	356,635	243,920	213,079	387,476	38,748
Total Long-Term Debt	\$19,495,929	<u>\$ 1,478,918</u>	\$3,219,790	\$17,755,057	\$3,942,741

The remainder of this page is left blank intentionally.

Bonds	Interest <u>Rates</u>	Date Issued	Final <u>Maturity</u>		nount of jinal Issue		tallment <u>yments</u>	Installment <u>Period</u>		Balance ne 30, 2018
Virginia Revolving Loan Fund	0.000%	06/16/2000	2019	\$	594,000	\$	14,850	Semi-Annual	\$	39,020
Water and Sewer Revenue Refunding	3.00-5.500%	11/15/2001	2019	42	2,470,000		565,000 540,000	Annual		6,895,000
Water and Sewer Reven Bond, Series 2007	ue 3.910%	11/1/2007	Balloon in 2019	2	2,700,000		16,235	Monthly		1,543,904
Water and Sewer VRA Series 2015	3.4925%	8/19/2015	2036		1,615,000	V	arious	Semi-Annual		1,330,000
Water and Sewer VRA Series 2015A	2.050%	8/19/2015	2036		1,733,769		53,054	Semi-Annual		1,551,850
Water and Sewer VRA Series 2015B	0.000%	12/17/2015	2037	2	2,400,570		60,014	Semi-Annual		2,215,911
Water and Sewer VRA Series 2015C	2.250%	12/17/2015	2047		1,189,280		27,691	Semi-Annual		1,160,497
Water and Sewer VRA Series 2015D	2.250%	12/17/2015	2047		1,293,500		30,117	Semi-Annual		1,262,194
Water and Sewer VRA Series 2018A	2.650%	3/9/2018	2048		621,200		15,241	Semi-Annual		621,200
Water and Sewer VRA Series 2018B	2.500%	6/21/2018	2040	14	4,500,000	4	472,028	Semi-Annual	1	4,500,000
									3	31,119,576
				VR	s: Loan fur A Series 2 A Series 2	018	A Bond	ırsed	(1	(254,142) 3,632,060)

The remainder of this page is left blank intentionally.

**Total Bonded Debt Before Deferrals Less Unfunded Portions of Bonds** 

\$ 17,233,374

The annual requirements to amortize bond principal and related interest are as follows:

						Deferred		Total LT
Fiscal Year		<u>Principal</u>		<u>Interest</u>	4	<u>Amounts</u>	Del	ot with Deferrals
2019	\$	3,872,750	\$	486,039	\$	31,243	\$	3,903,993
2020	Ψ	5,324,526	Ψ	274,477	Ψ	14,316	Ψ	5,338,842
2021		677,343		323,945		13,370		690,713
2022		982,514		486,290		12,087		994,601
2023		1,005,939		462,499		10,562		1,016,501
2024-2028		5,122,315		1,950,383		33,050		5,155,365
2029-2033		5,535,829		1,359,487		16,735		5,552,564
2034-2038		5,600,059		713,823		2,844		5,602,903
2039-2043		2,456,199		162,408		-		2,456,199
2044-2048		527,060		30,010		-		527,060
2049		15,042		199				15,042
		31,119,576		6,249,560		134,207		31,253,783
Less: Loan funds not disbursed								
VRA Series 2018A Bond		(254, 142)		-		-		(254, 142)
VRA Series 2018B Bond		(13,632,060)		<u>-</u>				(13,632,060)
	\$	17,233,374	\$	6,249,560	\$	134,207	\$	17,367,581
Compensated absences								387,476
							\$	17,755,057

Required escrow funds for debt service, repairs and replacements, and operating needs were as follows:

Operating funds reserve	\$1,524,616
Replacement reserve	541,291
Debt service - 2001 bond	5,968,639
Debt service - 2015C bond	27,699
Debt service - 2015D bond	30,128
Debt service - accrued interest	34,096
	\$8,126,469

The Authority is required to maintain a debt service coverage ratio of 120 percent (as defined in the bond Master Trust Agreement and related amendments) and to annually obtain a consulting engineer's report to determine amounts needed to escrow for future repairs, replacements, and operating needs. The Authority received the most recent report in January 2018 for the fiscal year 2017. The management of the Authority believes it is in compliance with all requirements.

Revenue bonds require all revenues and receipts derived by the Authority to be pledged as security for the bonds. In addition, a security interest in all accounts receivable for services is granted to the issuer of the bonds.

# **Advance Refunding and Deferred Amount**

In 2001, the Authority issued \$42,470,000 in Refunding Revenue Bonds with an average interest rate of 5.25% to advance refund \$42,465,000 of outstanding 1991 Series bonds with an average interest rate of 6.25% in order to reduce the interest rate and reduce total debt service payments over the life of the loan. The net proceeds from the issuance were deposited into an irrevocable trust with an escrow agent to provide for all future debt service payments on the 1991 Series bonds and, as a result, the 1991 Series bonds are considered defeased and the liability is not reported on the Authority's financial statements, only the balance of the 2001 Series bonds. The reacquisition price of the new bonds was \$42,889,650 and the carrying amount of the old bonds was \$41,292,795 which resulted in a Deferred Amount on Refunding of \$1,596,855. This amount is being amortized into interest expense over 19 years using the effective interest method and had an unamortized balance of \$88,881 and \$133,661 at June 30, 2018 and 2017, respectively. This is reported as a Deferred Outflow of Resources on the Authority's Statements of Net Position.

	_	Balance lv 1. 2017	Increase	•	D	ecrease	_	Balance e 30. 2018		e Within ne Year
Details of Refunding of Debt	<u>Ju</u>	<u>ıy 1, 2017</u>	increase	<u>5</u>	De	ecrease	June	e 30, 2016	<u>OI</u>	<u>ie rear</u>
2001 Refunding of Debt	\$	133,661	\$		\$	44,780	\$	88,881	\$	44,475

# Net Investment in Capital Assets

The "net investment in capital assets" amount reported on the Statements of Net Position as of June 30, 2018 and 2017 is determined as follows:

	<u>2018</u>	<u>2017</u>
Net Investment in Capital Assets		
Cost of capital assets	\$ 143,047,712	\$ 141,962,505
Less: Accumulated depreciation	(76,466,176)	(73,368,596)
Book value	66,581,536	68,593,909
Less: Capital related debt	(17,367,581)	(19,139,294)
Net Investment in Capital Assets	\$ 49,213,955	\$ 49,454,615

The remainder of this page is left blank intentionally.

# **Capital Contributions**

Capital contributions represent proceeds from federal, state, and local agencies for the following capital projects:

# Source of Revenue Project

# State and Local Funding

County of Henry, Virginia	CCBC Water Tank and Waterline Extensions	\$ 91,110
Total State and Local Funding		91,110

# **Federal Funding**

Rural Development	58 West Model Grant	30,000
Virginia Resources Authority	Reed Creek	141,735
Virginia Resources Authority	Fieldale	414,513
Total Federal Funding		586,248
Total Capital Contributions		\$677,358

# 1 Operating Leases

The Authority leased its office space from the County for a fifteen-year term commencing November 1, 1997 and ended on October 31, 2012. The lease is renewable annually for one-year terms and has been renewed for a one-year term ending October 31, 2018. In lieu of rent, the Authority renovated a portion of the building for the County's and Authority's use. These improvements (shown as leasehold improvements) are being depreciated over the life of the lease.

# ▲ Commitments and Contingencies

Federal programs in which the Authority participates were audited in accordance with the requirements of Title 2 U.S. Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance). Pursuant to the provisions of the Uniform Guidance, all major programs and certain other programs were tested for compliance with applicable grant requirements. While no matters of noncompliance were disclosed by the audit, the Federal Government may subject grant programs to additional compliance tests which may result in disallowed expenditures. In the opinion of management, any future disallowance of current grant program expenditures, if any, would be immaterial.

Special purpose grants are subject to audit to determine compliance with their requirements. Authority officials believe that if any refunds are required, they will be immaterial.

# 1 2 Litigation

The City of Martinsville, Virginia (the "City") treats a portion of the Authority's sewage per a January 19, 1974 Agreement between the two entities. Recent events have revealed to the City that the need for significant infrastructure repairs and replacement of a portion of the City's sewer lines is fast approaching. The City has advised the Authority that it expects the Authority to defray some of the cost of these capital improvements and points to the Agreement as authority for its position in this regard. The cost to the City of its sewer line rehabilitation is approximated to be \$30,000,000 over a period of years. The Authority has been requested by the City to participate in the cost of such infrastructure rehabilitation and, to that end, the City has asked the Authority to determine how much of these costs the Authority is willing to defray.

The Agreement is less than clear as to the Authority's liability in this regard. Nonetheless, the Authority has offered to contribute the sum of \$2,315,282 to the rehabilitation of the City's sewer lines in return for indemnity against all future capital expenditures. In the opinion of the Authority's management and the Authority's legal counsel, said sum is a reasonable estimate of the Authority's responsibility under the Agreement.

As of the date of this report, the City has requested that the Authority pay them \$8,466,700 as the Authority's share of the sewer line remediation but has not offered to release the Authority from further obligations under the contract. It is anticipated that future talks will occur but, at this juncture, the Authority is unable to say what the City will say the Authority's reasonable obligations would be or to what extent they would go to attempt to enforce same. No legal action has been taken by either party as of the date of this report and no liability has been recorded by the Authority due to the uncertainty of the ultimate outcome of this matter.

# 1 3 Pension Plan

# **Plan Description**

All full-time, salaried permanent employees of the Political Subdivision are automatically covered by a 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 for which they and their employer pay contributions to VRS. Members are eligible to purchase prior service, based on specific criteria as defined in the *Code of Virginia*, as amended. Eligible prior service that may be purchased includes prior public service, active 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 different eligibility criteria. The specific information for each plan and the eligibility for covered groups within each plan are set out in the table below:

The remainder of this page is left blank intentionally.

PLAN 2	HYBRID <u>RETIREMENT PLAN</u>
About Plan 2 Plan 2 is a defined benefit plan. The retirement benefit is based on a member's age, creditable service, and average final compensation at retirement using a formula.	About the Hybrid Retirement Plan  The Hybrid Retirement Plan combines the features of a defined benefit plan and a defined contribution plan.  •The defined benefit is based on a member's age, creditable service, and average final compensation at retirement using a formula.
	<ul> <li>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.</li> </ul>
	•In addition to the monthly benefit payment payable from the defined benefit plan at retirement, a member may start receiving distributions from the balance in the defined contribution account, reflecting the contributions, investment gains or losses, and any required fees.
Eligible Members  Employees are in Plan 2 if their membership date is on or after July 1, 2010, or their membership date is before July 1, 2010, and they were not vested as of January 1, 2013.  Hybrid Opt-In Election  Eligible Plan 2 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014.  The Hybrid Retirement Plan's effective date for eligible Plan 2 members who opted in was July 1, 2014.  If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement Plan.  Members who were eligible for an optional retirement plan (ORP) and have prior service under Plan 2 were not eligible to elect the Hybrid Retirement Plan and remain as Plan 2 or ORP.	Eligible Members  Employees are in the Hybrid Retirement Plan if their membership date is on or after January 1, 2014. This includes:  •Political subdivision employees*  •Members in Plan 1 or Plan 2 w ho elected to opt into the plan during the election w indow held January 1 - April 30, 2014; the plan's effective date for opt-in members w as July 1, 2014  *Non-Eligible Members  Some employees are not eligible to participate in the Hybrid Retirement Plan. They include:  •Political subdivision employees w ho are covered by enhanced benefits for hazardous duty employees  Those employees eligible for an optional retirement plan (ORP) must elect the ORP plan or the Hybrid Retirement Plan. If these members have prior service under Plan 1 or Plan 2, they are not eligible to elect the Hybrid Retirement Plan and must select Plan 1 or Plan 2 (as applicable) or ORP.
	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 Plan 2 if their membership date is on or after July 1, 2010, or their membership date is before July 1, 2010, and they were not vested as of January 1, 2013.  Hybrid Opt-In Election  Eligible Plan 2 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election w indow held January 1 through April 30, 2014.  The Hybrid Retirement Plan's effective date for eligible Plan 2 members w ho opted in w as July 1, 2014.  If eligible deferred members returned to w ork during the election w indow, they were also eligible to opt into the Hybrid Retirement Plan.  Members w ho were eligible for an optional retirement plan (ORP) and have prior service under Plan 2 were not eligible to elect the Hybrid Retirement Plan and remain as

## PLAN 1

## **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 tow ard 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.

### PLAN 2

# **Retirement Contributions**

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

# Creditable Service

Same as Plan 1.

# Vesting

Same as Plan 1.

# HYBRID RETIREMENT PLAN

## **Retirement Contributions**

A member's retirement benefit is funded through mandatory and voluntary contributions made by the member and the employer to bot 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 tow ard 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 w hen they reach five years (60 months) of creditable service. Plan 1 or Plan 2 members w ith at least five years (60 months) of creditable service w ho 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 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.

PLAN1	PLAN 2	HYBRID <u>RETIREM ENT PLAN</u>	
		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 70 1/2.	
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	Calculating the Benefit See definition under Plan 1.	Calculating the Benefit  Defined Benefit Component: See definition under Plan 1.  Defined Contribution Component: The benefit is based on contributions made by the member and any matching contributions made by the employer, plus net investment earnings on those contributions.	
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.	Average Final Compensation  A member's average final compensation is the average of their 60 consecutive months of highest compensation as a covered employee.	Average Final Compensation  Same as Plan 2. It is used in the retirement formula for the defined benefit component of the plan.	
Service Retirement Multiplier  VRS: The retirement multiplier is a factor used in the formula to determine a final retirement benefit. The retirement multiplier for non-hazardous duty members is 1.70%.	VRS: Same as Plan 1 for service earned, purchased, or granted prior to January 1, 2013. For non-hazardous duty members, the retirement multiplier is 1.65% for creditable service earned, purchased, or granted on or after January 1, 2013.	Service Retirement Multiplier  Defined Benefit Component:  VRS: The retirement multiplier for the defined benefit component is 1.00%.  For members w ho opted into the Hybrid Retirement Plan from Plan 1 or Plan 2, the applicable multipliers for those plans will be used to calculate the retirement benefit for service credited in those plans	
Sheriffs and regional jail superintendents: The retirement multiplier for sheriffs and regional jail superintendents is 1.85%.	Sheriffs and regional jail superintendents: Same as Plan 1.	Sheriffs and regional jail superintendents: Not applicable.	
Political subdivision hazardous duty employees: The retirement multiplier of eligible political subdivision hazardous duty employees other than sheriffs and regional jail superintendents is 1.70% or 1.85% as elected by the employer.	Political subdivision hazardous duty employees: Same as Plan 1.	Political subdivision hazardous duty employees: Not applicable.  Defined Contribution Component Not applicable.	

PLAN1	PLAN 2	HYBRID <u>RETIREMENT PLAN</u>	
Normal Retirement Age VRS: Age 65.	Normal Retirement Age VRS: Normal Social Security retirement age.	Normal Retirement Age Defined Benefit Component: VRS: Same as Plan 2.	
Political subdivisions hazardous duty employees: Age 60.	Political subdivisions hazardous duty employees: Same as Plan 1.	Political subdivisions hazardous duty employees: Not applicable.	
		<b>Defined Contribution Component:</b> Members are eligible to receive distributions upon leaving employment subject to restrictions.	
<b>Earliest Unreduced Retirement Eligibility VRS:</b> Age 65 with at least five years (60 months) of creditable service or at age 50 with at least 30 years of creditable service.	<b>Earliest Unreduced Retirement Eligibility VRS:</b> Normal Social Security retirement age with at least five years (60 months) of creditable service or when their age and service equal 90.	Earliest Unreduced Retirement Eligibility  Defined Benefit Component:  VRS: Normal Social Security retirement age and have at least five years (60 months) of creditable service or when their age and service equal 90.	
Political subdivisions hazardous duty employees:  Age 60 with at least five years of creditable service or	Political subdivisions hazardous duty employees: Same as Plan 1.	Political subdivisions hazardous duty employees: Not applicable.	
age 50 w ith at least 25 years of creditable service.		<b>Defined Contribution Component:</b> Members are eligible to receive distributions upon leaving employment subject to restrictions.	
<b>VRS:</b> Age 55 with at least five years (60 months) of creditable service or age 50 with at least 10 years of creditable service.	Earliest Reduced Retirement Eligibility VRS: Age 60 with at least five years (60 months) of creditable service.	Earliest Reduced Retirement Eligibility  Defined Benefit Component:  VRS: Age 60 with at least five years (60 months) of creditable service.	
Political subdivisions hazardous duty employees: Age 50 with at least five years of creditable service.	Political subdivisions hazardous duty employees: Same as Plan 1.	Political subdivisions hazardous duty employees: Not applicable	
		Defined Contribution Component:  Members are eligible to receive distributions upon leaving employment subject to restrictions.	
Cost-of-Living Adjustment (COLA) in Retirement The Cost-of-Living Adjustment (COLA) matches the first 3% increase in the Consumer Price Index for all Urban Consumers (CPI-U) and half of any additional increase (up	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	Cost-of-Living Adjustment (COLA) in Retirement Defined Benefit Component: Same as Plan 2	
to 4%) up to a maximum COLA of 5%.	to 2%), for a maximum COLA of 3%.	Defined Contribution Component: Not applicable	
Eligibility: For members w ho retire w ith an unreduced benefit or w ith a reduced benefit w ith at least 20 years of creditable service, the COLA w ill go into effect on July 1 after one full calendar year from the retirement date.	Eligibility: Same as Plan 1	Eligibility: Same as Plan 1 and Plan 2	
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.			

# PLAN 1

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 w ithin 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 1.70% 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 towards vesting, eligibility for retirement and the health insurance credit. Only active members are eligible to purchase prior service. Members also may be eligible to purchase periods of leave without pay.

# PLAN 2

Exceptions to COLA Effective Dates: Same as Plan 1

# Disability Coverage

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

# Purchase of Prior Service

Same as Plan 1

# HYBRID RETIREMENT PLAN

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

# Disability Coverage

Employees of political subdivisions (including Plan 1 and Plan 2 opt-ins) participate in the Virginia Local Disability Program (VLDP) unless their local governing body provides an employer-paid comparable program for its members.

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

# Purchase of Prior Service

# Defined Benefit Component:

Same as Plan 1, with the following exceptions:

· Hybrid Retirement Plan members are ineligible for ported service.

# **Defined Contribution Component:**

Not applicable

# **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	42
Inactive members:	
Vested	5
Non-vested	5
Active elsewhere in VRS	16
Total inactive members	26
Active members	53
Total covered employees	121

# **Contributions**

The contribution 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.

If the employer used the certified rate: The political subdivision's contractually required contribution rate for the year ended June 30, 2018 was 6.92% 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 employees during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the pension plan from the political subdivision were \$161,212 and \$158,274 for the years ended June 30, 2018 and June 30, 2017, respectively.

# **Net Pension Liability**

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

# Actuarial Assumptions - General Employees

The total pension liability for General Employees in the Political Subdivision'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 percent

Salary increases, including

inflation 3.5 percent - 5.35 percent

Investment rate of return 7.0 percent, net of pension plan investment

expense, including inflation\*

# 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 70-90.

# 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:

<sup>\*</sup>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.

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 70-75	
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 lognormal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension System investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimate of arithmetic real rates of return for each major asset class are summarized in the following table:

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

	<u>li</u>	ncr	ease (Decrease	)	
	Total		Plan		Net
	Pension		<b>Fiduciary</b>		Pension
	Liability		Net Position		Liability
	<u>(a)</u>		<u>(b)</u>		<u>(a) - (b)</u>
Balances at June 30, 2016	\$ 11,505,046	\$	10,301,502	\$	1,203,544
Changes for the Year					
Service cost	214,217		-		214,217
Interest	785,488		-		785,488
Benefit changes	-		-		-
Changes of assumptions	(136,024)		-		(136,024)
Differences between expected					
and actual experience	123,682		-		123,682
Contributions - employer	-		154,971		(154,971)
Contributions - employee	-		112,606		(112,606)
Net investment income	-		1,238,906		(1,238,906)
Benefit payments, including refunds	(567,590)		(567,590)		-
Administrative expenses	-		(7,292)		7,292
Other changes	 		(1,098)		1,098
Net Changes	 419,773		930,503		(510,730)
Balances at June 30, 2017	\$ 11,924,819	\$	11,232,005	\$	692,814

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

The following presents the net pension liability of the political subdivision using the discount rate of 7.00%, as well as what the political subdivision's net pension 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:

1.00%	Current	1.00%
Decrease	Discount	Increase
(6.00%)	Rate (7.00%)	(8.00%)

#### Political subdivision's

Net Pension Liability \$2,302,180 \$ 692,814 \$(647,582)

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

For the year ended June 30, 2018, the political subdivision recognized pension expense of \$198,529. At June 30, 2018, the political subdivision reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Outflows ources	d Inflows sources
Differences between expected and actual experience	\$ 219,369	\$ 65,008
Change in assumptions	-	99,556
Net difference between projected and actual earnings on pension plan investments	-	158,482
Employer contributions subsequent to the measurement date	 161,212	 <u> </u>
Total	\$ 380,581	\$ 323,046

\$161,212 reported as deferred outflows of resources related to pensions resulting from the political subdivision's contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the fiscal year ending June 30, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in future reporting periods as follows:

Year	<b>Ended</b>
<u>Jur</u>	<u>ne 30,</u>

2019	\$ (11,195)
2020	13,893
2021	(656)
2022	(105,719)
2023	-
Thereafter	-

### Pension Plan Data

Information about the VRS Political Subdivision Retirement Plan's Fiduciary Net Position 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 <a href="http://www.varetire.org/Pdf/Publications/2017-annual-report.pdf">http://www.varetire.org/Pdf/Publications/2017-annual-report.pdf</a>, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, Virginia 23218-2500.

# 1 4 Group Life Insurance Program

### **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 in the table below:

### **GROUP LIFE INSURANCE PROGRAM PLAN PROVISIONS**

### **Eliqible Employees**

The Group Life Insurance Program was established July 1, 1960, for state employees, teachers and employees of political subdivisions that elect the program, including the following employers that do not participate in VRS for retirement:

- City of Richmond
- City of Portsmouth
- · City of Roanoke
- City of Norfolk
- · Roanoke City Schools Board

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

### **Benefit Amounts**

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

- **Natural Death Benefit** 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 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 \$12,131 and \$11,893 for the years 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 \$187,000 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 .01240% as compared to .01257% at June 30, 2016.

For the year ended June 30, 2018, the participating employer recognized GLI OPEB expense of \$(107). Since there was a change in proportionate share between measurement dates, a portion of the GLI OPEB expense was related to deferred amounts from changes in proportion.

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

	Deferred C		 red Inflows <u>Resources</u>
Differences between expected and actual experience	\$	-	\$ 4,000
Change in assumptions		-	10,000
Net difference between projected and actual earnings on GLI OPEB program investments		-	7,000
Changes in proportion		-	-
Employer contributions subsequent to the measurement date		12,131	<u>-</u>
Total	\$	12,131	\$ 21,000

\$12,131 reported as deferred outflows of resources related to the GLI OPEB resulting from the employer's contributions subsequent to the measurement date will be recognized as a reduction of the Net GLI OPEB Liability in the Fiscal Year ending June 30, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the GLI OPEB will be recognized in the GLI OPEB expense in future reporting periods as follows:

### Year Ended June 30,

2019	\$ (4,000)
2020	(4,000)
2021	(4,000)
2022	(4,000)
2023	(3,000)
Thereafter	(2,000)

### **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 - General state employees Teachers SPORS employees VaLORS employees JRS employees Locality - General employees Locality - Hazardous Duty employees	3.5 percent - 5.35 percent 3.5 percent - 5.95 percent 3.5 percent - 4.75 percent 3.5 percent - 4.75 percent 4.5 percent 3.5 percent - 5.35 percent 3.5 percent - 4.75 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 - General State Employees

#### Pre-Retirement:

RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with Scale BB to 2020; males set back 1 year, 85% of rates; females set back 1 year.

### 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 1 year; females set back 1 year with 1.5% increase compounded from ages 70 to 85.

### Post-Disablement:

RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males 115% of rates; females 130% 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)	Update to a more current mortality table – RP-2014 projected to 2020		
Retirement Rates	Lowered rates at older ages and changed final retirement from 70-75		
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service		
Disability Rates	Adjusted rates to better match experience		
Salary Scale	No change		
Line of Duty Disability	Increase rate from 14% to 25%		

### Mortality rates - Teachers

### Pre-Retirement:

RP-2014 White Collar Employee Rates to age 80, White Collar Healthy Annuitant Rates at ages 81 and older projected with scale BB to 2020.

### Post-Retirement:

RP-2014 White Collar Employee Rates to age 49, White Collar Health Annuitant Rates at ages 50 and older projected with scale BB to 2020; males 1% increase compounded from ages 70 to 90; females set back 3 years with 1.5% increase compounded from ages 65 to 70 and 2.0% increase compounded from ages 75 to 90.

### Post-Disablement:

RP-2014 Disability Mortality Rates projected with Scale BB to 2020; 115% of rates for males and females.

The actuarial assumptions used in the June 30, 2016 valuation were based on the results of an actuarial experience study for the four-year 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)	Update to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement from 70-75
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change

### Mortality rates - SPORS Employees

### Pre-Retirement:

RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with Scale BB to 2020; males 90% of rates; females set forward 1 year.

### 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 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years.

### Post-Disablement:

RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males set forward 2 years; unisex using 100% male.

The actuarial assumptions used in the June 30, 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)	Update to a more current mortality table – RP-2014 projected to 2020 and reduced margin for future improvement in accordance with experience		
Retirement Rates	Increased age 50 rates and lowered rates at older ages		
Withdrawal Rates	Adjusted rates to better fit experience		
Disability Rates	Adjusted rates to better match experience		
Salary Scale	No change		
Line of Duty Disability	Increased rate from 60% to 85%		

### Mortality rates - VaLORS Employees

### Pre-Retirement:

RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with Scale BB to 2020; males 90% of rates; females set forward 1 year.

### 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 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years.

### Post-Disablement:

RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males set forward 2 years; unisex using 100% male.

The actuarial assumptions used in the June 30, 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)	Update to a more current mortality table – RP-2014 projected to 2020 and reduced margin for future improvement in accordance with experience		
Retirement Rates	Increased age 50 rates and lowered rates at older ages		
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service		
Disability Rates	Adjusted rates to better match experience		
Salary Scale	No change		
Line of Duty Disability	Decreased rate from 50% to 35%		

### Mortality rates - JRS Employees

### Pre-Retirement:

RP-2014 Employee Rates to age 80, Healthy Annuitant Rates at ages 81 and older projected with scale BB to 2020; males set back 1 year, 85% of rates; females set back 1 year.

### 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 1 year; females set back 1 year with 1.5% compounding increase from ages 70 to 85.

### Post-Disablement:

RP-2014 Disability Mortality Rates projected with Scale BB to 2020; males 115% of rates; females 130% of rates.

The actuarial assumptions used in the June 30, 2016 valuation were based on the results of an actuarial experience study for the four-year 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-	Update to a more current mortality	
retirement healthy, and disabled)	table – RP-2014 projected to 2020	
Retirement Rates	Decreased rates at first retirement eligibility	
Withdrawal Rates	No change	
Disability Rates	Removed disability rates	
Salary Scale	No change	

### Mortality rates - Largest Ten Locality Employers - General Employees

### Pre-Retirement:

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

### Post-Retirement:

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

### Post-Disablement:

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

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

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

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

### Pre-Retirement:

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

### Post-Retirement:

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

#### Post-Disablement:

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

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

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Update 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%

### Mortality rates - Largest Ten Locality Employers - Hazardous Duty Employees

### Pre-Retirement:

RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with Scale BB to 2020; males 90% of rates; females set forward 1 year.

### 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 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years.

### Post-Disablement:

RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males set forward 2 years; unisex using 100% male.

The actuarial assumptions used in the June 30, 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-	Update to a more current mortality
retirement healthy, and disabled)	table – RP-2014 projected to 2020
Retirement Rates	Lowered retirement rates at older ages
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Increased disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 60% to 70%

### Mortality rates – Non-Largest Ten Locality Employers – Hazardous Duty Employees

### Pre-Retirement:

RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with Scale BB to 2020; males 90% of rates; females set forward 1 year.

### 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 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years.

### Post-Disablement:

RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males set forward 2 years; unisex using 100% male.

The actuarial assumptions used in the June 30, 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)	Update to a more current mortality table – RP-2014 projected to 2020	
Retirement Rates	Increased age 50 rates and lowered rates at older ages	
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year	
Disability Rates	Adjusted rates to better match experience	
Salary Scale	No change	
Line of Duty Disability	Decreased rate from 60% to 45%	

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

Asset Class (Strategy)	Target <u>Allocation</u>	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	<u>15.00%</u>	9.53%	<u>1.43%</u>
Total	<u>100.00%</u>		<u>4.80%</u>
*Expected arithmeti	Inflation c nominal return		<u>2.50%</u> 7.30%
*Expected arithmetic nominal return			<u>7.30%</u>

<sup>\*</sup> 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:

1.00%	Current	1.00%
Decrease	Discount	Increase
(6.00%)	Rate (7.00%)	(8.00%)

Employer's Proportionate Share of the Group Life Insurance Program Net OPEB Liability

\$ 242,000 \$ 187,000 \$ 142,000

### **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 <a href="http://www.varetire.org/Pdf/Publications/2017-annual-report.pdf">http://www.varetire.org/Pdf/Publications/2017-annual-report.pdf</a>, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

## 15 Health Insurance Credit Program

### Plan Description

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

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

### POLITICAL SUBDIVISION HEALTH INSURANCE CREDIT PROGRAM (HIC) PLAN PROVISIONS

### **Eligible Employees**

The Political Subdivision Retiree Health Insurance Credit Program was established July 1, 1993 for retired political subdivision employees of political subdivision employees who elect the benefit and who retire with at least 15 years of service credit.

Eligible employees of participating are enrolled automatically upon employment. They include:

• Full-time permanent salaried employees of the participating political subdivision who are covered under the VRS pension plan.

#### **Benefit Amounts**

The political subdivision's Retiree Health Insurance Credit Program provided the following benefits for eligible employees:

- <u>At Retirement</u> For employees who retire, the monthly benefit is \$1.50 per year of service per month with a maximum benefit of \$45.00 per month.
- <u>Disability Retirement</u> For employees who retire on disability or go on long-term disability under the Virginia Local Disability Program (VLDP), the monthly benefit is \$45.00 per month.

### **Health Insurance Credit Program Notes:**

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

### **Employees Covered by Benefit Terms**

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

	<u>Number</u>
Inactive members or their beneficiaries currently receiving benefits	16
Inactive members:	
Vested	-
Non-vested	-
Active elsewhere in VRS	
Total inactive members	16
Active members	53
Total covered employees	69

### **Contributions**

The contribution requirement for active employees is governed by §51.1-1402(E) of the Code of Virginia, as amended, but may be impacted as a result of funding options provided to political subdivisions by the Virginia General Assembly. The political subdivision's contractually required employer contribution rate for the year ended June 30, 2018 was .31% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2015. The actuarially determined rate was expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Contributions from the political subdivision to the Political Subdivision Health Insurance Credit Program were \$7,222 and \$7,090 for the years ended June 30, 2018 and June 30, 2017, respectively.

### **Net HIC OPEB Liability**

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

### **Actuarial Assumptions**

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

Inflation	2.5 percent
Salary increases, including inflation Locality - General Employees Locality - Hazardous Duty Employees	3.5 percent - 5.35 percent 3.5 percent - 4.75 percent
Investment rate of return	7.0 percent, net of investment investment expense, including inflation*

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

### Mortality rates - Largest Ten Locality Employers - General Employees

### Pre-Retirement:

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

### Post-Retirement:

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

### Post-Disablement:

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

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

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

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

### Pre-Retirement:

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

### Post-Retirement:

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

### Post-Disablement:

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

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

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Update 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%

### Mortality rates - Largest Ten Locality Employers - Hazardous Duty Employees

### Pre-Retirement:

RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with Scale BB to 2020; males 90% of rates; females set forward 1 year.

### 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 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years.

### Post-Disablement:

RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males set forward 2 years; unisex using 100% male.

The actuarial assumptions used in the June 30, 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-	Update to a more current mortality
retirement healthy, and disabled)	table – RP-2014 projected to 2020
Retirement Rates	Lowered retirement rates at older ages
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Increased disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 60% to 70%

### Mortality rates – Non-Largest Ten Locality Employers – Hazardous Duty Employees

### Pre-Retirement:

RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with Scale BB to 2020; males 90% of rates; females set forward 1 year.

### 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 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years.

### Post-Disablement:

RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males set forward 2 years; unisex using 100% male.

The actuarial assumptions used in the June 30, 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)	Update to a more current mortality table – RP-2014 projected to 2020				
Retirement Rates	Increased age 50 rates and lower rates at older ages				
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year				
Disability Rates	Adjusted rates to better match experience				
Salary Scale	No change				
Line of Duty Disability	Decreased rate from 60% to 45%				

### Long-Term Expected Rate of Return

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

Asset Class (Strategy)	Target <u>Allocation</u>	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	<u>15.00%</u>	9.53%	<u>1.43%</u>
Total	<u>100.00%</u>		<u>4.80%</u>
	Inflation		<u>2.50%</u>
*Expected arithmetic	nominal return		<u>7.30%</u>

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

### Changes in Net HIC OPEB Liability:

		Increase (Decrease)					
		Total		Plan		Net	
		HIC OPEB		Fiduciary		HIC OPEB	
		Liability		<b>Net Position</b>		Liability	
		<u>(a)</u>		<u>(b)</u>		<u>(a) - (b)</u>	
Balances at June 30, 2016	\$	132,018	\$	42,525	\$	89,493	
Changes for the Year							
Service cost		2,173		-		2,173	
Interest		9,009		-		9,009	
Benefit changes		-		-		-	
Changes of assumptions		(5,144)		-		(5,144)	
Differences between expected							
and actual experience		-		-		-	
Contributions - employer		-		7,090		(7,090)	
Net investment income		-		4,912		(4,912)	
Benefit payments		(6,653)		(6,653)		-	
Administrative expenses		-		(80)		80	
Other changes	_	<del>_</del>	_	246	_	(246)	
Net Changes		(615)		5,515		(6,130)	
Balances at June 30, 2017	\$	131,403	\$	48,040	\$	83,363	

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

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

	1.00% Decrease (6.00%)		Current Discount Rate (7.00%)		1.00% Increase (8.00%)	
Political subdivision's						
Net HIC OPEB Liability	\$	97,111	\$	83,363	\$	71,610

Political subdivision's

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

For the year ended June 30, 2018, the political subdivision recognized Health Insurance Credit Program OPEB expense \$6,850, the political subdivision reported deferred outflows of resources and deferred inflows of resources related to the Political Subdivision Health Insurance Credit Program from the following sources:

	Deferred Or of Resou		Deferred of Reso	
Differences between expected and actual experience	\$	-	\$	-
Change in assumptions		-		4,359
Net difference between projected and actual earnings on HIC OPEB plan investments		-		1,531
Employer contributions subsequent to the measurement date		7,222		
Total	\$	7,222	\$	5,890

\$7,222 reported as deferred outflows of resources related to the HIC OPEB resulting from the political subdivision's contributions subsequent to the measurement date will be recognized as a reduction of the Net HIC OPEB Liability in the Fiscal Year ending June 30, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the HIC OPEB will be recognized in the HIC OPEB expense in future reporting periods as follows:

\$ (1,168)
(1,168)
(1,168)
(1,167)
(785)
(434)
\$

### Health Insurance Credit Program Plan Data

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

# 16<sup>County</sup> of Henry OPEB Plan for Retirees' Health Insurance

### General Information About the OPEB Plan

Employer. County of Henry

Summary of Plan Provisions

The following is our understanding of the plan provisions for retiree coverage. Where the following differs from the official plan rules, the valuation should be revised.

### **Eligibility Conditions**

A retiring employee participating in the Employer's medical program with at least 15 years of County service, and retires under the VRS plan is eligible to elect post-retirement coverage.

### Eligibility for VRS Retirement Early Retirement – Plan 1

- The employee must have 10 years of service and 50 years of age; or,
- The employee must have 5 years of service and 55 years of age.

### Full Retirement - Plan 1

- The employee must have 65 years of age and vested in VRS; or,
- The employee must have 30 years of service and 50 years of age.

### Early Retirement - Plan 2&Hybrid

The employee must have 5 years of service and 60 years of age.

### Full Retirement - Plan 2&Hybrid

- The employee must have reached Normal Social Security retirement age with at least 5 years of service; or,
- Age and service must equal 90.

### **Covered Employees**

All full time employees (must be covered by the active plan at the time of retirement). Coverage ceases at age 65 for new retirees.

Type of Coverage	Employee	Spouse
Life Insurance	No post-retirement life insurance is valued	Not Applicable
Dental Coverage	Post-retirement dental coverage is provided on an Access only basis, retirees pay the active rate.	Same as Employee
Vision Coverage	Post-retirement vision coverage is provided on an Access only basis (COBRA – 18 months). Retirees pay retiree rate.	Same as Employee
Medical Coverage  ➤ Employee Cost  Sharing	Active employees and retirees charged the same rate. Retiree pays 100% of this blended premium.	Employee pays 100% of blended spousal premium
Coverage Ceases	For future retirees, coverage ceases upon the earlier of death or attainment of Medicare eligibility. For current retirees, coverage ceases upon Death.	For future retirees, spouse coverage ceases upon earlier of retiree death or Medicare eligibility. Surviving spouses are offered COBRA to age 65.
Disability Coverage	No post-retirement disability insurance is valued	Not Applicable
Long Term Care Coverage	No post-retirement long term care insurance is valued	Not Applicable

#### **Amendments**

The Employer reserves the right to amend the Plan at any time subject to Board action.

### Commonwealth of Virginia

The Commonwealth of Virginia reimburses Public Service Authority retirees' an amount equal to \$1.50 times their years of service up to 30 years. This credit has no effect on the Employer's medical contribution or OPEB obligation.

Employees covered by benefit terms. At July 1, 2016 (the valuation date) the following employees were covered by the benefit terms:

	Count	tal OPEB iability
Inactive employees or beneficiaries currently receiving benefits	4	\$ 69,235
Inactive employees entitled to but not yet receiving benefits	-	-
Active employees	<u>51</u>	 338,852
Total	<u>55</u>	\$ 408,087

### **Employer Contributions**

The funding policy of the plan sponsor is to contribute annually an amount sufficient to satisfy benefit payment requirements to participants.

### **Employee Contributions**

None

### **Net OPEB Liability**

The employer's net OPEB liability is reported herein as of June 30, 2018 for the employer fiscal year and reporting period of July 1, 2017 to June 30, 2018. The values shown for this fiscal year and reporting period are based on a measurement date of July 1, 2017 and the corresponding measurement period of July 1, 2016 to July 1, 2017. The measurement of the total OPEB liability is based on a valuation dare of July 1, 2016.

Actuarial Assumptions and Actuarial Methods. The total OPEB liability in the July 1, 2017 actuarial valuation was determined using the following key actuarial assumptions, applied to all periods included in the measurement:

Expected Return on Assets 7.50%

Discount Rate 3.56%

2.50% Salary Scale

Healthcare Cost Trend Rates 1.00% for fiscal

> year end 2017, reverting to 7.50% for fiscal year end 2018, decreasing 0.30% per year to an ultimate rate of 5.10%.

Mortality RP-2014

Mortality Table

fully

generational, with base year 2006, projected using a twodimensional mortality improvement scale MP-2017.

**Actuarial Cost Method** 

Entry Age **Actuarial Cost** Method

### **Expected Return on Assets**

7.50%

### **Discount Rate**

The discount rate has been set equal to 3.56% and represents the Municipal GO AA 20year yield curve rate as of June 30, 2017.

### **Changes in the Net OPEB Liability**

			<u>Inc</u>	rease (Decreas	se)		
		Total		Plan			Net
	OPE	B Retiree HI		Fiduciary		<b>OPE</b>	B Retiree HI
		Liability		Net Position		Liab	oility (Asset)
		<u>(a)</u>		<u>(b)</u>			<u>(a) - (b)</u>
Balances at July 1, 2017	\$	408,087	\$	108,836		\$	299,251
Changes for the Year							
Service cost		13,334		-			13,334
Interest		14,774		-			14,774
Contributions - employer		-		25,948	*		(25,948)
Net investment income		-		15,136			(15, 136)
Benefit payments, including refunds		(12,948)		(12,948)	**		-
Administrative expenses		<u> </u>		(636)			636
Net Changes		15,160		27,500			(12,340)
Balances at June 30, 2018***	\$	423,247	\$	136,336		\$	286,911

<sup>\*</sup> Contributions include \$13,000 plan sponsor contribution to VML/VACO pooled account.

### Sensitivity of the net OPEB liability to changes in the discount rate

The following presents the Net OPEB liability (asset) of the employer as of the measurement date calculated using the discount rate, as well as what the employer's total OPEB liability would be if it were calculated using a discount rate that is 1-percentage point lower or 1-percentage point higher than the current rate:

1.00%	Current	1.00%
Decrease	<b>Discount Rate</b>	<u>Increase</u>

Employer's Net
OPEB Retiree Health

Insurance Liability \$ 316,349 \$ 286,911 \$ 260,410

### Sensitivity of the net OPEB liability to changes in the Trend rate

The following presents the Net OPEB liability (asset) of the employer as of the measurement date calculated using the trend rate, as well as what the employer's total OPEB liability would be if it were calculated using a discount rate that is 1-percentage point lower or 1-percentage point higher than the current rate:

	D	1.00% ecrease	_	urrent nd Rate	1.00% Increase
Employer's Net OPEB Retiree Health Insurance Liability	\$	252.180	\$	286 911	\$ 327,896

<sup>\*\*</sup> Benefit payments are "pay-as-you-go" cost.

<sup>\*\*\*</sup> Measurement date is July 1, 2017

### OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

For the year ended June 30, 2018, under GASB 75 the employer OPEB expense is \$28,108. The deferred outflows of resources and deferred inflows of resources related to OPEB as of June 30, 2018 from various sources are as follows:

	Deferred O		Deferred Inflows of Resources
Differences between expected and actual experience	\$	-	\$ -
Change in assumptions		-	-
Net difference between projected and actual earnings on OPEB plan investments		12,224	-
Employer contributions after measurement date but prior to fiscal year end		13,000	
Total	\$	25,224	\$ -

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

### Year Ended June 30,

2019	\$ -
2020	-
2021	-
2022	-
2023	-

### **7**Risk Management

The Authority is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The Authority joined together with other local governments in the Virginia Municipal League Pool, a public entity risk pool currently operating as a common risk management and insurance program for participating local governments. The Authority pays an annual premium to the pool for substantially all of its insurance coverage. In the event of a loss creating a deficit or depletion of all available excess insurance, the pool may assist all members in the proportion that the premium of each bears to the total premiums of all members in the year in which such deficit occurs. The settled claims for 2018 and 2017 did not exceed insurance.

# 18 Water and Sewer Purchases

In 1974, the Authority and neighboring City of Martinsville, Virginia (the "City") signed a service agreement in which the Authority would purchase water and sewage treatment from the City and share in the annual operating costs of the plants in proportion to its actual use as measured by the volume of water used and sewage it contributed. It also allowed for the Authority to purchase capacity rights into the water and sewer plants at an agreed-upon price.

# 19<sup>Restatement</sup>

The net position of the business-type activities has been restated to reflect the cumulative effect resulting from the implementation of GASB Statement #75 – Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions. The following reflects the effect of implementation of this new accounting standard.

### Net Position Restated Due to GASB 75 Implementation:

Balance - as previously reported - June 30, 2017	\$65,464,214
Change in OPEB balances:	
VRS Group Life Insurance - Net OPEB	(220,000)
VRS Group Life Insurance - Deferred Outflows	11,893
VRS Health Insurance Credit - Net OPEB	(89,493)
VRS Health Insurance Credit - Deferred Outflows	7,090
Retiree Health Insurance - Net OPEB	(306,216)
Total Restated Amounts	(596,726)
Restated Balance - beginning of the year - July 1, 2017	\$64,867,488

# 20<sup>Subsequent Events</sup>

Management has performed an analysis of the activities and transactions subsequent to June 30, 2018 to determine the need for any adjustments to and/or disclosures within the audited financial statements for the year ended June 30, 2018. Management has performed their analysis through November 2, 2018.

# REQUIRED SUPPLEMENTARY INFORMATION

# Schedule of Changes in the Political Subdivision's Net Pension Liability and Related Ratios

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total pension liability				
Service cost	\$ 214,217	\$ 207,152	\$ 197,594	\$ 199,863
Interest	785,488	761,707	687,221	656,584
Changes of benefit terms	-	-	-	-
Differences between expected and actual experience	123,682	(130,672)	589,016	-
Changes in assumptions	(136,024)		-	-
Benefit Payments, including refunds of employee contributions	(567,590)	(429,348)	(390,123)	(447,437)
Net change in total pension liability	419,773	408,839	1,083,708	409,010
Total pension liability - beginning	11,505,046	11,096,207	10,012,499	9,603,489
Total pension liability - ending (a)	<u>\$11,924,819</u>	<u>\$11,505,046</u>	\$11,096,207	<u>\$10,012,499</u>
Plan fiduciary net position				
Contributions - employer	\$ 154,971		•	
Contributions - employee	112,606	111,309	119,286	108,301
Net investment income	1,238,906	177,159	454,864	1,374,762
Benefit Payments, including refunds of employee contributions	(567,590)	, ,	, ,	
Administrative expense	(7,292)	, ,	(6,254)	, ,
Other	(1,098)		(94)	
Net change in plan fiduciary net position	930,503	9,951	329,696	1,166,669
Plan fiduciary net position - beginning	10,301,502	10,291,551	9,961,855	8,795,186
Plan fiduciary net position - ending (b)	<u>\$11,232,005</u>	<u>\$10,301,502</u>	<u>\$10,291,551</u>	<u>\$ 9,961,855</u>
Political subdivision's net pension liability - ending (a) - (b)	\$ 692,814	\$ 1,203,544	\$ 804,656	\$ 50,644
Plan fiduciary net position as a percentage of the total				
pension liability	94.19%	89.54%	92.75%	99.49%
Covered payroll	\$ 2,287,191	\$ 2,252,132	\$ 2,161,601	\$ 2,047,723
Political subdivision's net pension liability as a percentage of covered payroll	30.29%	53.44%	37.23%	2.47%

### Schedule of Employer Contributions

### Last 10 Fiscal Years

				butions in ation to				Contributions
	Re	tractually equired ntribution	Re	ractually quired ribution	Defic (Ex	ibution ciency cess)	Employer's Covered Payroll	as a % of Covered Payroll
Date		(1)		(2)	(	(3)	(4)	(5)
2018	\$	161,212	\$	161,212	\$	_	\$2,329,670	6.92%
2017		158,274		158,274		-	2,287,191	6.92%
2016		159,224		159,224		-	2,252,132	7.07%
2015		152,161		152,161		-	2,161,601	7.04%
2014		138,474		138,474		-	2,047,723	6.76%
2013		136,619		136,619		-	2,109,778	6.48%
2012		40,267		40,267		-	2,035,564	1.98%
2011		40,161		40,161		-	2,056,050	1.95%
2010		37,185		37,185		-	2,003,384	1.86%
2009		37,446		37,446		-	2,082,795	1.80%

### For Reference Only:

Column 1 – Employer contribution rate multiplied by the employer's covered payroll Column 2 – Actual employer contribution remitted to VRS

Column 4 – Employer's covered payroll amount for the fiscal year

Notes to Required Supplementary Information

For the Year Ended June 30, 2018

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

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

### Largest 10 - Non-Hazardous Duty:

Mortality Rates (Pre-retirement, post-	Update to a more current mortality table – RP-
retirement healthy, and disabled)	2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final
	retirement from 70-75
Withdrawal Rates	Adjusted rates to better fit experience at each
	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%

# Schedule of Employer's Share of Net OPEB Liability Group Life Insurance Program

For the Year Ended June 30, 2018\*

	<u>2018</u>
Employer's Proportion of the Net GLI OPEB Liability (Asset)	0.012400%
Employer's Proportionate Share of the Net GLI OPEB Liability (Asset)	\$ 187,000
Employer's Covered Payroll	\$ 2,287,191
Employer's Proportionate Share of the Net GLI OPEB Liability (Asset) as a Percentage of its Covered Payroll	8.176%
Plan Fiduciary Net Position as a Percentage of the Total GLI OPEB Liability	48.86%

Schedule is intended to show information for 10 years. Since 2018 is the first year of presentation, only one year of data is available. However, additional years will be included as they become available.

<sup>\*</sup>The amounts presented have a measurement date of the previous fiscal year end.

Schedule of Employer Contributions - GLI OPEB

Last 10 Fiscal Years (as information becomes available)

Date	R	ntractually equired ntribution (1)	Relat Contra Req Contr	utions in ion to ictually uired ibution 2)	Defi (Ex	ribution ciency cess) (3)	Employer's Covered Payroll (4)	Contributions as a % of Covered Payroll (5)
2018	\$	12,131	\$	12,131	\$	_	\$2,329,670	0.52%
2017		11,893		11,893		-	2,287,191	0.52%
2016		n/a	n	/a	ı	n/a	n/a	n/a
2015		n/a	n	/a		n/a	n/a	n/a
2014		n/a	n	/a	ı	n/a	n/a	n/a
2013		n/a	n	/a		n/a	n/a	n/a
2012		n/a	n	/a		n/a	n/a	n/a
2011		n/a	n	/a		n/a	n/a	n/a
2010		n/a	n	/a	ı	n/a	n/a	n/a
2009		n/a	n	/a	ı	n/a	n/a	n/a

### For Reference Only:

Column 1 – Employer contribution rate multiplied by the employer's covered payroll

Column 2 – Actual employer contribution remitted to VRS

Column 4 – Employer's covered payroll amount for the fiscal year

Notes to Required Supplementary Information – GLI OPEB

For the Year Ended June 30, 2018

**Changes of benefit terms –** There have been no actuarially material changes to the System benefit provisions since the prior actuarial valuation.

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

### **General State Employees**

Mortality Rates (Pre-retirement, post-	Update to a more current mortality table – RP-
retirement healthy, and disabled)	2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final
	retirement from 70-75
Withdrawal Rates	Adjusted rates to better fit experience at each
	year age and service through 9 years of
	service
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Increase rate from 14% to 25%

### **Teachers**

Mortality Rates (Pre-retirement, po	ost-	Update to a more current mortality table – RP-
retirement healthy, and disabled)		2014 projected to 2020
Retirement Rates		Lowered rates at older ages and changed final
		retirement from 70-75
Withdrawal Rates		Adjusted rates to better fit experience at each
		year age and service through 9 years of
		service
Disability Rates		Adjusted rates to better match experience
Salary Scale		No change

### **SPORS Employees**

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

### **VaLORS Employees**

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

### JRS Employees

Mortality Rates (Pre-retirement, p	ost-	Update to a more current mortality table – RP-
retirement healthy, and disabled)		2014 projected to 2020
Retirement Rates		Decreased rates at first retirement eligibility
Withdrawal Rates		No change
Disability Rates		Removed disability rates
Salary Scale		No change

### Largest Ten Locality Employers – General Employees

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

### Non-Largest Ten Locality Employers – General Employees

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

### Largest Ten Locality Employers – Hazardous Duty Employees

Mortality Rates (Pre-retirement, post-	Update to a more current mortality table – RP-
retirement healthy, and disabled)	2014 projected to 2020
Retirement Rates	Lowered retirement rates at older ages
Withdrawal Rates	Adjusted termination rates to better fit
	experience at each age and service year
Disability Rates	Increased disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 60% to 70%

### Non-Largest Ten Locality Employers – Hazardous Duty Employees

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

Schedule of Changes in the Political Subdivision's Net HIC OPEB Liability and Related Ratios

		<u>2017</u>
Total HIC OPEB liability		
Service cost	\$	2,173
Interest		9,009
Changes of benefit terms		-
Differences between expected and actual experience		-
Changes in assumptions		(5,144)
Benefit Payments	_	(6,653)
Net change in total HIC OPEB liability Total HIC OPEB liability - beginning		(615) 132,018
	Φ.	
Total HIC OPEB liability - ending (a)	\$	131,403
Plan fiduciary net position		
Contributions - employer	\$	7,090
Net investment income		4,912
Benefit Payments		(6,653)
Administrative expense		(80)
Other	_	246
Net change in plan fiduciary net position		5,515
Plan fiduciary net position - beginning	_	42,525
Plan fiduciary net position - ending (b)	\$	48,040
Political subdivision's net HIC OPEB liability - ending (a) - (b)	\$	83,363
(a) (a)	<u> </u>	
Plan fiduciary net position as a percentage of the total		
HIC OPEB liability		36.56%
Covered payroll	\$	2,287,191
Political subdivision's net HIC OPEB liability as a percentage of	:	
covered payroll		3.64%

Schedule of Employer Contributions - HIC OPEB

Last 10 Fiscal Years (as information becomes available)

Date	Re	tractually equired ntribution (1)	Rela Contr Red	outions in ation to ractually quired ribution (2)	Defic (Exc	bution iency cess) 3)	Employer's Covered Payroll (4)	Contributions as a % of Covered Payroll (5)
2018	\$	7,222	\$	7,222	\$	_	\$2,329,670	0.31%
2017		7,090		7,090		-	2,287,191	0.31%
2016		n/a		n/a	n	/a	n/a	n/a
2015		n/a		n/a	n	/a	n/a	n/a
2014		n/a		n/a	n	/a	n/a	n/a
2013		n/a		n/a	n	/a	n/a	n/a
2012		n/a		n/a	n	/a	n/a	n/a
2011		n/a		n/a	n	/a	n/a	n/a
2010		n/a		n/a	n	/a	n/a	n/a
2009		n/a		n/a	n	/a	n/a	n/a

### For Reference Only:

Column 1 – Employer contribution rate multiplied by the employer's covered payroll

Column 2 - Actual employer contribution remitted to VRS

Column 4 – Employer's covered payroll amount for the fiscal year

Notes to Required Supplementary Information – HIC OPEB

For the Year Ended June 30, 2018

**Changes of benefit terms** – There have been no actuarially material changes to the System benefit provisions since the prior actuarial valuation.

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

### **Largest Ten Locality Employers - General Employees**

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

### Non-Largest Ten Locality Employers - General Employees

(	ost-	Update to a more current mortality table – RP-
retirement healthy, and disabled)		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%

### Largest Ten Locality Employers - Hazardous Duty Employees

Mortality Rates (Pre-retirement, pretirement healthy, and disabled)	oost-	Update to a more current mortality table – RP- 2014 projected to 2020
Retirement Rates		Lowered retirement rates at older ages
Withdrawal Rates		Adjusted termination rates to better fit experience at each age and service year
Disability Rates		Increased disability rates
Salary Scale		No change
Line of Duty Disability		Increased rate from 60% to 70%

### Non-Largest Ten Locality Employers – Hazardous Duty Employees

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

Schedule of Changes in the Political Subdivision's Net OPEB Liability - Retiree Health Insurance and Related Ratios

Last 10 Fiscal Years (as information becomes available)

		<u>2018</u>
Total OPEB liability Service cost Interest Changes of benefit terms	\$	13,334 14,774
Differences between expected and actual experience Changes in assumptions Benefit Payments, including refunds of employee contributions		- - (12,948)
Net change in total OPEB liability Total OPEB liability - beginning Total OPEB liability - ending (a)	<del></del> \$	15,160 408,087 423,247
Plan fiduciary net position	<u></u>	-,
Contributions - employer * Contributions - employee	\$	25,948
Net investment income Benefit Payments, including refunds of employee contributions Administrative expense Other		15,136 (12,948) (636)
Net change in plan fiduciary net position Plan fiduciary net position - beginning		27,500 108,836
Plan fiduciary net position - ending (b)	<u>\$</u>	136,336
Political subdivision's net OPEB liability - ending (a) - (b)	<u>\$</u>	286,911
Plan fiduciary net position as a percentage of the total OPEB liability		32.21%
Covered employee-payroll	\$	2,222,703
Political subdivision's net OPEB liability as a percentage of covered payroll		12.91%

<sup>\*</sup> Contribution plus "pay-as-you-go" cost

Schedule of Employer Contributions - OPEB Retiree Health Insurance

Last 10 Fiscal Years (as information becomes available)

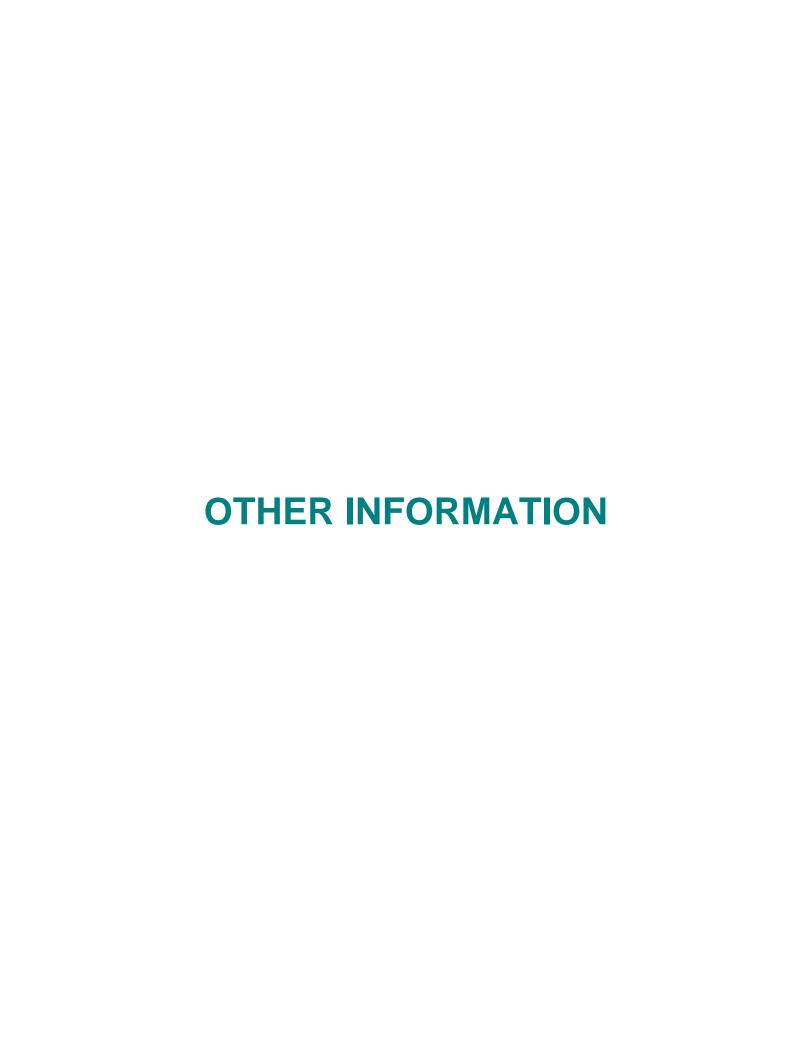
Date	Det	tuarially termined ntribution (1)	Rela Actu Dete	butions in ation to uarially ermined ribution (2)	Defic (Ex	ibution ciency cess) 3)	Expected Covered Employee Payroll (4)	as a % of
2018	\$	12,948	\$	12,948	\$	-	\$2,222,703	0.58%
2017		n/a		n/a	n	/a	n/a	n/a
2016		n/a		n/a	r	ı/a	n/a	n/a
2015		n/a		n/a	r	ı/a	n/a	n/a
2014		n/a		n/a	r	ı/a	n/a	n/a
2013		n/a		n/a	r	ı/a	n/a	n/a
2012		n/a		n/a	r	ı/a	n/a	n/a
2011		n/a		n/a	r	ı/a	n/a	n/a
2010		n/a		n/a	r	ı/a	n/a	n/a
2009		n/a		n/a	n	/a	n/a	n/a

#### **Notes**

The employer has elected to make an annual contribution equal to the benefit payments. The employer share of net benefits is the difference between the expected benefit payments and the retiree contributions. It is sometimes referred to as "pay-as-you-go."

The expected benefit payments are actuarially determined to reflect the age difference between the overall covered group and the retiree group.

Actuarially determined contributions, which are based on the expected "pay-as-you-go" cost, and actual contributions are from the measurement periods ending June 30 of the year prior to the year-end of the reporting periods shown. This is the first valuation under GASB 75 for the reported Plan.



# Revenues by Source

#### Last Ten Fiscal Years

Fiscal									
Years					G	rants and			
<b>Ended</b>				Investment		Other	C	onnection	
<u>June 30</u>	<u>Water</u>	<u>Sewer</u>	<u>Other</u>	<b>Earnings</b>	Co	ntributions		<u>Fees</u>	<u>Totals</u>
2018	\$ 7,092,814	\$4,972,918	\$ 822,748	\$ 378,726	\$	677,358	\$	68,000	\$14,012,564
2017	7,103,980	5,095,250	790,811	340,012		896,386		46,292	14,272,731
2016	7,001,004	5,193,665	837,617	393,482		1,075,869		109,850	14,611,487
2015	6,933,471	4,830,544	863,771	379,498		173,085		57,950	13,238,319
2014	6,828,639	4,656,607	768,128	371,617		37,480		41,600	12,704,071
2013	6,043,520	4,026,670	762,450	366,579		32,739		47,924	11,279,882
2012	6,013,784	4,003,556	735,664	359,540		2,518,393		47,650	13,678,587
2011	5,973,085	4,248,075	772,940	343,548		1,252,729		70,493	12,660,870
2010	5,974,119	4,307,681	860,959	453,285		832,967		55,077	12,484,088
2009	6,025,273	4,176,475	783,762	479,495		802,086		168,234	12,435,325

#### Table 2

#### Expenses by Function

#### Last Ten Fiscal Years

Fiscal Years Ended June 30	<u>Ma</u>	System aintenance	Treatment	gineering and lapping	A	Adn	ninistration and <u>Other</u>	<u>De</u>	preciation	An	nortization and <u>Interest</u>	<u>Totals</u>
2018	\$	1,697,202	\$3,071,162	\$ 321,179	\$	\$	3,238,496	\$	3,218,463	\$	676,436	\$12,222,938
2017		1,439,404	3,114,831	362,299			2,183,031		3,131,080		833,701	11,064,346
2016		1,336,527	3,491,294	323,939			2,107,370		3,085,840		1,016,061	11,361,031
2015		1,206,781	3,183,910	289,375			2,072,224		3,073,959		1,128,956	10,955,205
2014		1,249,187	3,117,220	320,103			2,091,333		3,061,958		1,263,436	11,103,237
2013		1,319,612	3,024,397	315,279			1,909,491		3,056,933		1,388,263	11,013,975
2012		1,184,196	2,952,894	308,273			1,767,202		3,242,047		1,596,439	11,051,051
2011		1,241,531	2,981,668	303,426			1,810,205		3,547,867		1,715,083	11,599,780
2010		1,246,422	2,926,319	302,313			1,740,155		3,085,006		1,826,122	11,126,337
2009		1,259,964	3,073,049	298,341			1,753,201		2,966,307		1,863,496	11,214,358

# Revenue Bond Debt Service Coverage

#### Last Ten Fiscal Years

Fiscal	Unrestricted							
Years	Cash		Direct					
Ended	Beginning	Gross	Operating	Net			Total	
<u>June 30</u>	of Year	Revenues	Expenses**	<u>Available</u>	Principal***	<u>Interest</u>	<u>Debt</u>	<u>Coverage</u>
2018	\$ 9,143,032	\$13,335,206	\$7,216,760	\$15,261,478	\$3,684,256	\$ 677,694	\$ 4,361,950	3.50
2017	8,544,150	13,376,344	7,099,565	14,820,929	3,383,019	832,952	4,215,971	3.52
2016	7,159,883	13,535,618	7,259,130	13,436,371	3,138,527	955,079	4,093,606	3.28
2015	6,344,143	13,065,234	6,752,290	12,657,087	2,960,185	1,128,206	4,088,391	3.10
2014	5,385,959	12,666,591	6,777,843	11,274,707	2,808,413	1,262,686	4,071,099	2.77
2013	5,467,913	11,247,143	6,568,779	10,146,277	2,671,909	1,387,513	4,059,422	2.50
2012	5,398,771	11,160,194	6,212,565	10,346,400	2,545,666	1,504,481	4,050,147	2.55
2011	5,342,244	11,408,141	6,336,830	10,413,555	2,424,671	1,614,321	4,038,992	2.58
2010	4,980,342	11,651,121	6,215,209	10,416,254	2,313,914	1,716,690	4,030,604	2.58
2009	5,501,702	11,633,239	6,384,555	10,750,386	2,203,387	1,811,566	4,014,953	2.68

<sup>\*\*</sup>Excluding depreciation, interest, and amortization.

<sup>\*\*\*</sup>Excludes debt refinancing payoffs.

#### Schedule of Insurance in Force

June 30, 2018

# Type Coverage (Insurer)

#### **Liability Limits**

Commercial General Liability (Virginia Municipal Liability Pool)	\$ 1,000,000 Each Occurrence Limit 100,000 Fire Damage Limit 10,000 Medical Expense Limit 10,000 No Fault Property Damage
Primary Automobile Liability (Virginia Municipal Liability Pool)	\$ 25,000 Bodily Injury Per Person 50,000 Bodily Injury Per Accident 20,000 Property Damage Per Accident 1,000,000 Per Occurrence
Automobile Uninsured Motorists (Virginia Municipal Liability Pool)	\$ 25,000 Bodily Injury Per Person 50,000 Bodily Injury Per Accident 20,000 Property Damage Per Accident 10,000 Automobile Medical Payments
Automobile Physical Damage (Virginia Municipal Liability Pool)	Actual Comprehensive Actual Collision \$ 250 Deductible/Comprehensive Deductible/Collision
Excess Liability Coverage (Virginia Municipal Liability Pool)	\$ 2,000,000 Per Occurrence
Commercial Property Coverage (Virginia Municipal Liability Pool)	\$48,562,836 Blanket Real and Personal Property 100,000 Extra Expense (Monthly Limit) 1,000 Deductible
Commercial Inland Marine Coverage (Virginia Municipal Liability Pool)	\$ 400,000 Contractor's Equipment
Boiler and Machinery Coverage (Virginia Municipal Liability Pool)	\$50,000,000 Direct Damage (Per Accident) 100,000 Refrigerant 100,000 Ammonia Contamination 100,000 Expediting Expenses 100,000 Hazardous Substances 100,000 Water Damage 100,000 Computer 100,000 Perishable Goods 250,000 Demolition & ICC 250,000 Newly Acquired Location
Public Employees Dishonesty Coverage (Virginia Municipal Liability Pool)	\$ 1,000,000 Aggregate Amount 5,000 Deductible
Worker's Compensation (Virginia Municipal Group Self-Insurance Association)	Statutory State Statutory Provision \$ 1,000,000 Employer's Liability Limit
Public Official Liability (Commonwealth of Virginia - Division of Risk Management)	\$ 1,000,000 Limit of Liability 1,000 Deductible

Raw Water Production by Source (In Million Gallons)

Last Ten Fiscal Years

Fiscal				
Years	City of			
Ended	Martinsville/			
<u>June 30</u>	<u>Eden</u>	<u>Philpott</u>	Wells	<u>Totals</u>
2018	6	1,122	3	1,131
2017	6	1,069	4	1,079
2016	9	1,032	9	1,050
2015	10	1,022	10	1,042
2014	12	1,023	11	1,046
2013	14	1,021	9	1,044
2012	13	999	9	1,021
2011	13	1,014	10	1,037
2010	11	1,030	9	1,050
2009	122	833	11	966

**Source:** Reports prepared by the Authority and submitted to the Virginia Department of Health.

Table 6

Waste Water Treatment By Plant (In Million Gallons)

Last Ten Fiscal Years

Fiscal Years			
Ended	City of	Lower	
June 30	Martinsville	Smith River	Totals
2018	696	_	696
2017	767	-	767
2016	854	-	854
2015	651	-	651
2014	590	-	590
2013	681	-	681
2012	580	-	580
2011	716	-	716
2010	822	-	822
2009	713	-	713

Note: Does not include waste treatment in lagoon systems.

Source: Flow Reports

#### **Demographic Statistics**

#### Last Ten Fiscal Years

Fiscal Years Ended June 30	Population (1)	Per Capita Income (2)	Median Age ( <u>3)</u>	Unemployment Rate (4)
2018	51,975	35,899	46.2	3.9%
2017	52,352	34,968	46.0	5.1%
2016	52,822	33,439	45.5	5.7%
2015	53,273	32,546	45.0	7.3%
2014	53,560	31,650	44.5	8.4%
2013	53,889	30,097	44.7	9.3%
2012	53,867	29,628	44.7	9.8%
2011	54,151	28,773	44.7	10.7%
2010	53,795	30,018	41.8	13.9%
2009	53,869	27,427	41.9	15.3%

#### Sources:

- 1) U. S. Census, 2010; other figures are annually adjusted estimates prepared by the University of Virginia Weldon Cooper Center for Public Service.
- 2) Bureau of Economic Analysis. Figures are for Martinsville and Henry County combined; Henry County only figures not available; information based on latest available data.
- 3) U. S. Census Bureau.
- 4) Virginia Labor Market Information.

# List of Ten Largest Customers

Year Ended June 30, 2018

				Percent of
Customer	<u>Business</u>		<u>Amount</u>	Total Billings*
C.P. Films, Inc.	Manufacturing	\$	1,010,204	8.37%
Monogram Snack Martinsville, LLC	Manufacturing	·	411,320	3.41%
Henry County Schools	Public School System		166,212	1.38%
County of Henry, Virginia	Local Government		149,964	1.24%
Scrub Board/Bobby Nickelston	Laundries and Car Washes		117,555	0.97%
King's Grant	Retirement Community		99,233	0.82%
CAH Properties	Rental Properties		72,546	0.60%
Stanleytown Healthcare	Healthcare/Rehab Facility		71,369	0.59%
Dayton-Chambers Inc. (Dutch Inn)	Hotel and Restaurant		66,830	0.55%
LIC Associates	Rental Properties		55,929	<u>0.46%</u>
Total		\$	2,221,162	<u>18.41%</u>
*Total Billings		\$	12,065,732	

Miscellaneous Statistical Data

As of June 30, 2018

Type of Entity Independent authority created pursuant to the Virginia

Water and Sewer Authorities Act, Section 15.2-5100,

Code of Virginia (1950), as amended.

Date of Incorporation 1965

Selected Information Number of Employees 54

12,459 Number of Active Water Connections Number of Active Sewer Connections 7,326 Miles of Water Lines 372 Miles of Sewer Lines 244 Number of Fire Hydrants 1.624 Water Treatment Plant Capacity 4 MGD City of Martinsville, Virginia Purchased Water Capacity 2 MGD Sewer Treatment Plant Capacity 6 MGD City of Martinsville Purchased Sewer Capacity 4 MGD Average Daily Water Consumption 3.10 MGD 1.91 MGD Average Daily Sewage Flow

Bond Rating Not rated

Minimum Consumption

Charge Per Service (Sewer charges are based on water

consumption.)

Residential customers charged a minimum monthly consumption charge of \$30 per service for up to 4,000 gallons consumption.

Non-Residential customers charged a minimum monthly consumption

charge of \$45 per service for up to 4,000 gallons consumption. Institutional customers charged a minimum monthly consumption charge of \$68.50 per service for up to 6,000 gallons consumption.

Additional Consumption The following charges apply to each 1,000 gallons, or fractions

thereof, of water consumed above mentioned minimums:

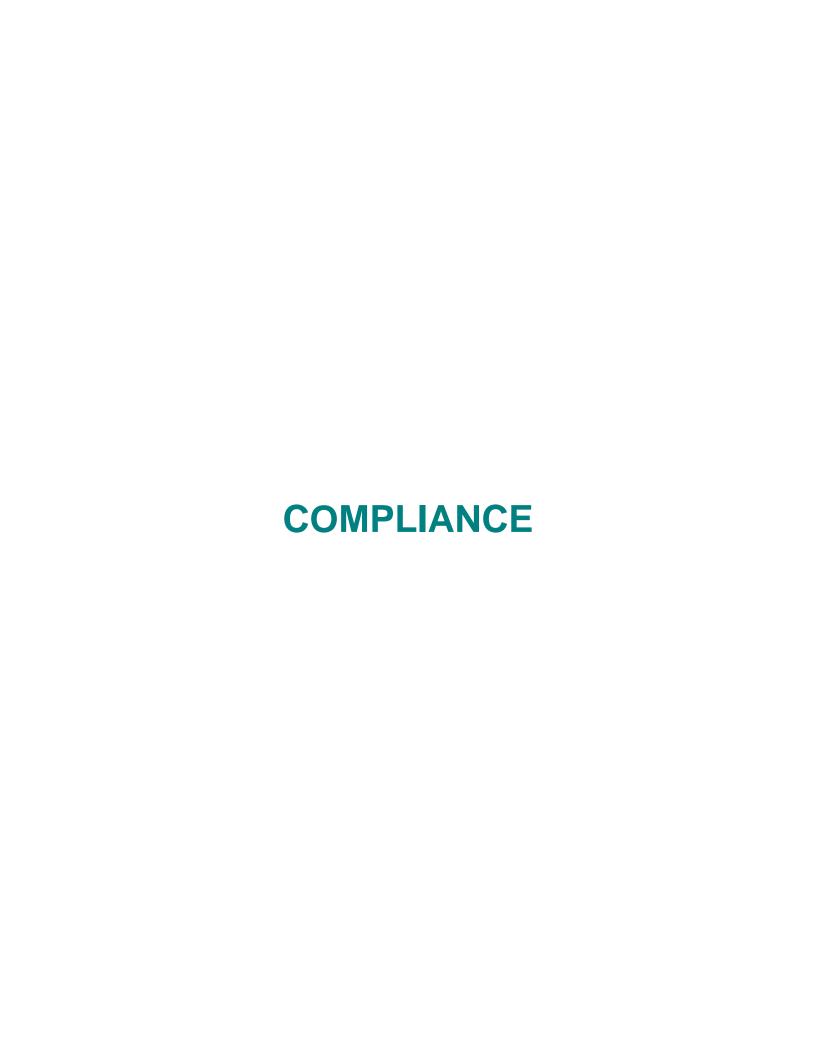
Residential customers - \$4.70 per additional 1,000 gallons.

Non-Residential customers - \$7 per additional 1,000 gallons.

Institutional customers - \$8.10 per additional 1,000 gallons.

Exceptions The Authority reserves the right to negotiate contracts for service

charges with industrial users.





Robin B. Jones, CPA, CFP David V. Alga, CPA, CVA, CFF Denise C. Williams, CPA, CSEP Scott A. Thompson, CPA, CGMA Kimberly W. Jackson, CPA Nadine L. Chase, CPA Monique A. Lubick, CPA

Sherwood H. Creedle, Emeritus

Members of American Institute of Certified Public Accountants Virginia Society of Certified Public Accountants

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

To the Board of Directors
Henry County Public Service Authority

We have audited, in accordance with the auditing standards generally accepted in the United States of America, the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, and the *Specifications for Audits of Authorities, Boards, and Commissions* issued by the Auditor of Public Accounts of the Commonwealth of Virginia, the financial statements of the business-type activities and fiduciary fund of the Henry County Public Service Authority, as of and for the year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise the Henry County Public Service Authority's basic financial statements, and have issued our report thereon dated November 2, 2018.

#### **Internal Control Over Financial Reporting**

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

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

#### **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the Henry County Public Service 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*.

#### **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.

Creedle Jones & Alga, P.C. Certified Public Accountants

Creedle, Jones & alga, P.C.

South Hill, Virginia November 2, 2018



Robin B. Jones, CPA, CFP David V. Alga, CPA, CVA, CFF Denise C. Williams, CPA, CSEP Scott A. Thompson, CPA, CGMA Kimberly W. Jackson, CPA

Monique A. Lubick, CPA

Nadine L. Chase, CPA

Sherwood H. Creedle, Emeritus

Members of American Institute of Certified Public Accountants Virginia Society of Certified Public Accountants

# INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE FOR EACH MAJOR PROGRAM AND ON INTERNAL CONTROL OVER COMPLIANCE REQUIRED BY THE UNIFORM GUIDANCE

To the Board of Directors
Henry County Public Service Authority

#### **Report on Compliance for Each Major Federal Program**

We have audited the Henry County Public Service Authority's compliance with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on each of the Henry County Public Service Authority's major federal programs for the year ended June 30, 2018. Henry County Public Service Authority's major federal programs are identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs.

#### Management's Responsibility

Management is responsible for compliance with federal statutes, regulations, and the terms and conditions of its federal awards applicable to its federal programs.

#### Auditor's Responsibility

Our responsibility is to express an opinion on compliance for each of the Henry County Public Service Authority's major federal programs based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance 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; the audit requirements of Title 2 U.S. Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance); and the Specifications for Audits of Authorities, Boards, and Commissions issued by the Auditor of Public Accounts of the Commonwealth of Virginia. Those standards, the Uniform Guidance, and specifications require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about the Henry County Public Service Authority's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for each major federal program. However, our audit does not provide a legal determination of the Henry County Public Service Authority's compliance.

#### Opinion on Each Major Federal Program

In our opinion, the Henry County Public Service Authority, complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended June 30, 2018.

#### **Report on Internal Control over Compliance**

Management of the Henry County Public Service Authority is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered the Henry County Public Service Authority's internal control over compliance with the types of requirements that could have a direct and material effect on each major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major federal program and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the Henry County Public Service Authority's internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A material weakness in internal control over compliance is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. A significant deficiency in internal control over compliance is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance 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 compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

Creedle Jones & Alga, P.C. Certified Public Accountants

Crudle, Jones & alga, P.C.

South Hill, Virginia November 2, 2018

#### Schedule of Expenditures of Federal Awards

Year Ended June 30, 2018

Federal Grantor/Pass-through Grantor/ <u>Program or Cluster Title</u>	Federal CFDA Number	Pass- Through Entity Identifying <u>Number</u>	Total Federal <u>Expenditure</u>	es
Environmental Protection Agency				
Pass-Through Payments				
Virginia Department of Health				
Drinking Water State Revolving Funds Cluster				
Capitalization Grants for Drinking Water State Revolving Funds				
Loan Proceeds/Expenditures				
Series 2018A - Reed Creek Project	66.468	601	\$ 367,0	)58
Series 2018B - Philpott Project	66.468	601	867,9	940
Subtotal - loan proceeds			1,234,9	998
Grant Proceeds				
Reed Creek Project	66.468	601	141,7	735
Fieldale Project	66.468	601	414,5	513
Subtotal - grant proceeds			556,2	248
Total - Capitalization Grants and Loans			1,791,2	246
Direct Payments				
Grant Proceeds				
USDA Rural Development	10.759	n/a	30,0	000
Grand Totals			\$ 1,821,2	<u> 246</u>

See accompanying notes to schedule of expenditures of federal awards

.

Notes to Schedule of Expenditures of Federal Awards

Year Ended June 30, 2018

#### 1. Basis of Presentation

The accompanying Schedule of Expenditures of Federal Awards (the Schedule) includes the Federal award activity of Henry County Public Service Authority under programs of the federal government for the year ended June 30, 2018. The information in this Schedule is presented in accordance with the requirements of Title 2 U.S. Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance). Because the Schedule presents only a selected portion of the operations of Henry County Public Service Authority, it is not intended to and does not present the financial position, changes in net position, or cash flows of Henry County Public Service Authority.

#### 2. Summary of Significant Accounting Policies

Expenditures reported on the Schedule are reported on the cash basis of accounting. Such expenditures are recognized following the cost principles contained in the Uniform Guidance, wherein certain types of expenditures are not allowable or are limited as to reimbursement.

#### 3. Indirect Cost Rate

Henry County Public Service Authority has elected not to use the 10% de minimis indirect cost rate as allowed under the Uniform Guidance.

#### 4. Federal Loans Outstanding

Henry County Public Service Authority had the following federal loan balances outstanding at year-end:

#### Federal Loans Outstanding through Virginia Resources Authority

Program	<u>Number</u>	Out	standing
Virginia Department of Health			
Capitalization Grants for Drinking Water State Revolving Funds Clu	ster		
Loan Name			
Series 2018A - Reed Creek Project - Loan proceeds	66.468	\$	367,058
, , ,			
Series 2018B - Fieldale Project - Loan proceeds	66.468		867,940
, ,			<u> </u>
Total Loans Outstanding		\$ 1	,234,998

Federal Catalog

**Amount** 

#### 5. Subrecipients

No awards were passed through to subrecipients.

#### Schedule of Findings and Questioned Costs

Year Ended June 30, 2018

#### **SUMMARY OF AUDITOR'S RESULTS**

#### **Financial Statements**

Type of auditor's report issued:

Unmodified

Internal control over financial reporting:

Material weakness(es) identified?

Significant deficiencies identified?

None Reported

Noncompliance material to financial statements noted?

**Federal Awards** 

Internal control over major programs:

Material weakness(es) identified?

Significant deficiencies identified?

None Reported

Type of auditor's report issued on compliance for major programs: Unmodified

Any audit findings disclosed that are required to be reported in accordance 2 CFR section 200.516(a)?

No

Major programs:

CFDA Number(s) Name of Federal Program or Cluster

66.468 Capitalization Grants for Drinking Water

State Revolving Funds

Dollar threshold used to distinguish between type A and type B programs: \$750,000

Auditee qualified as low-risk auditee?