MONTGOMERY COUNTY
PUBLIC SERVICE AUTHORITY
(A Component Unit of Montgomery County, Virginia)

FINANCIAL REPORT

For the Fiscal Year Ended June 30, 2018

MONTGOMERY COUNTY
PUBLIC SERVICE AUTHORITY

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INTRODUCTORY SECTION

MONTGOMERY COUNTY
PUBLIC SERVICE AUTHORITY

DIRECTORY OF PRINCIPAL OFFICIALS
June 30, 2018

DIRECTORS

M. Todd King – Chair
Steve R. Fijalkowski – Vice Chair
Mary W. Biggs – Secretary/Treasurer

Sara R. Bohn	Darrell O. Sheppard
April N. DeMotts	Christopher A. Tuck

OFFICIALS

Robert C. Fronk	Director
Martin M. McMahon	Attorney

INDEPENDENT AUDITORS

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

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FINANCIAL SECTION

Financial Section contains the Basic Financial Statements.

BROWN EDWARDS
certified public accountants

INDEPENDENT AUDITOR'S REPORT

To the Honorable Members of the Board of Directors
Montgomery County Public Service Authority
Christiansburg, Virginia

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities and each major fund of the Montgomery County Public Service Authority (the "Authority"), a component unit of Montgomery County, Virginia, as of and for the year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

Our responsibility is to express 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. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the 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 Authority'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 Authority'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.

319 McClanahan Street, S.W. • Roanoke, Virginia 24014-7705 • 540-345-0936 • Fax: 540-342-6181 • www.BEcpas.com

Opinion

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

Change in Accounting Principle

As described in Note 14 to the financial statements, in 2018 the Authority adopted new accounting guidance, *GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other than Pension*. Our opinion is not modified with respect to this matter.

Report on Summarized Comparative Information

We have previously audited the Authority's 2017 financial statements, and our report dated November 14, 2017 expressed an unmodified opinion on the financial statements of the Authority. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2018, is consistent, in all material respects, with the audited financial statements from which it has been derived. Because information to restate prior years in relation to GASB 75, discussed above, is not readily available, the comparative information has not been restated.

Other Matters

Required Supplementary Information

Management has omitted management's discussion and analysis, the defined benefit pension plan schedules required by GASB 68, and the other postemployment benefit schedules required by GASB 75 that accounting principles generally accepted in the United States of America require to be presented to supplement the basic financial statements. Such missing 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. Our opinion on the basic financial statements is not modified with respect to this matter.

Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Authority's basic financial statements. The introductory section is presented for purposes of additional analysis and is not a required part of the basic financial statements. The introductory 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 it.

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

CERTIFIED PUBLIC ACCOUNTANTS

Roanoke, Virginia
November 30, 2018

BASIC FINANCIAL STATEMENTS

EXHIBIT 1

MONTGOMERY COUNTY PUBLIC SERVICE AUTHORITY
BUSINESS-TYPE ACTIVITIES

STATEMENT OF NET POSITION
June 30, 2018

	2018	(For Comparative Purposes Only) 2017
ASSETS		
Current assets:		
Cash and cash equivalents (Note 2)	$ 3,073,890	$ 2,159,306
Accounts receivable, net (Note 3)	658,637	595,680
Due from County (Note 11)	18,202	14,090
Inventories	31,630	31,287
Total current assets	3,782,359	2,800,363
Noncurrent assets:		
Cash and cash equivalents, restricted (Note 2)	74,520	70,310
Capital assets: (Note 4)		
Nondepreciable	1,246,524	1,217,389
Depreciable, net	15,419,481	16,271,470
Total noncurrent assets	16,740,525	17,559,169
Total assets	20,522,884	20,359,532
DEFERRED OUTFLOWS OF RESOURCES		
Deferred outflows related to pensions (Note 6)	89,373	182,267
Deferred outflows related to other postemployment benefits (Notes 7 and 8)	4,258	-
	93,631	182,267
LIABILITIES		
Current liabilities:		
Accounts payable and accrued expenses	255,660	231,812
Accrued payroll and related liabilities	46,779	44,321
Accrued interest payable	5,129	5,428
Due to County (Note 11)	5,145	10,772
Current portion of noncurrent liabilities (Note 5)	438,834	432,256
Total current liabilities	751,547	724,589
Noncurrent liabilities:		
Net pension liabililty (Note 6)	513,482	766,325
Net other postemployment benefit liability (Notes 7 and 8)	274,730	-
Customer deposits	74,520	70,310
Due in more than one year (Note 5)	5,850,878	6,361,407
Total noncurrent liabilities	6,713,610	7,198,042
Total liabilities	7,465,157	7,922,631
DEFERRED INFLOWS OF RESOURCES		
Deferred inflows related to pensions (Note 6)	107,414	48,078
Deferred inflows related to other postemployment benefits (Notes 7 and 8)	14,856	-
	122,270	48,078
NET POSITION		
Net investment in capital assets	11,741,294	12,335,115
Unrestricted	1,287,794	235,975
Total net position	$ 13,029,088	$ 12,571,090

The Notes to Financial Statements are an integral part of this statement.

EXHIBIT 2

MONTGOMERY COUNTY PUBLIC SERVICE AUTHORITY
BUSINESS-TYPE ACTIVITIES

STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION
For the Year Ended June 30, 2018

	2018	(For Comparative Purposes Only) 2017
OPERATING REVENUES		
Charges for services:		
Water revenues	$ 1,861,703	$ 1,659,610
Wastewater revenues	1,402,386	1,340,805
Penalty and reconnection charges	64,329	66,138
Fees	392,772	404,240
Miscellaneous	15,611	30,679
Total operating revenues	3,736,801	3,501,472
OPERATING EXPENSES		
Salaries and wages	888,301	917,871
Employee benefits	276,840	404,697
Utilities and telephone	104,953	110,188
Water and wastewater services	1,224,847	1,067,016
Operating supplies, fees, and permits	70,317	72,845
Professional services (Note 11)	175,718	180,640
Repairs and maintenance	189,104	172,409
Insurance	35,394	38,653
Vehicle supplies and maintenance	46,372	47,862
Bad debts	4,483	13,500
Office supplies and miscellaneous	40,466	41,099
Depreciation	879,399	878,336
Total operating expenses	3,936,194	3,945,116
Operating loss	(199,393)	(443,644)
NONOPERATING REVENUES (EXPENSES)		
Investment earnings	19,955	10,761
Facility fees	885,250	181,000
Gain (loss) on sale of surplus property	2,372	(102,880)
Interest expense	(149,479)	(154,449)
Total nonoperating revenues (expenses)	758,098	(65,568)
Income (loss) before contributions	558,705	(509,212)
CAPITAL CONTRIBUTIONS FROM DEVELOPERS	-	60,311
Change in net position	558,705	(448,901)
NET POSITION BEGINNING AT JULY 1, as restated (Note 14)	12,470,383	13,019,991
NET POSITION ENDING AT JUNE 30	$ 13,029,088	$ 12,571,090

The Notes to Financial Statements are an integral part of this statement.

EXHIBIT 3

MONTGOMERY COUNTY PUBLIC SERVICE AUTHORITY

STATEMENT OF NET POSITION – PROPRIETARY FUNDS
June 30, 2018

	Water	Wastewater	Total
ASSETS			
Current assets:			
Cash and cash equivalents	$ 2,609,202	$ 464,688	$ 3,073,890
Accounts receivable, net	383,529	275,108	658,637
Due from County	7,340	10,862	18,202
Inventories	30,961	669	31,630
Total current assets	3,031,032	751,327	3,782,359
Noncurrent assets:			
Cash and cash equivalents, restricted	44,370	30,150	74,520
Capital assets:			
Nondepreciable	1,228,524	18,000	1,246,524
Depreciable, net	8,244,188	7,175,293	15,419,481
Total noncurrent assets	9,517,082	7,223,443	16,740,525
Total assets	12,548,114	7,974,770	20,522,884
DEFERRED OUTFLOWS OF RESOURCES			
Deferred outflows related to pensions	50,272	39,101	89,373
Deferred outflows related to other postemployment benefits	2,376	1,882	4,258
Total deferred outflows	52,648	40,983	93,631
LIABILITIES			
Current liabilities:			
Accounts payable and accrued expenses	179,726	75,934	255,660
Accrued payroll and related liabilities	26,330	20,449	46,779
Accrued interest payable	3,187	1,942	5,129
Due to County	5,145	-	5,145
Current portion of noncurrent liabilities	256,851	158,220	415,071
Total current liabilities	471,239	256,545	727,784
Noncurrent liabilities:			
Net pension liabililty	288,834	224,648	513,482
Net other postemployment benefit liability	145,902	128,828	274,730
Customer deposits	44,370	30,150	74,520
Due in more than one year	2,876,369	1,810,276	4,686,645
Total noncurrent liabilities	3,355,475	2,193,902	5,549,377
Total liabilities	3,826,714	2,450,447	6,277,161
DEFERRED INFLOWS OF RESOURCES			
Deferred inflows related to pensions	60,420	46,994	107,414
Deferred inflows related to other postemployment benefits	8,077	6,779	14,856
	68,497	53,773	122,270
NET POSITION			
Net investment in capital assets	6,450,205	5,291,089	11,741,294
Unrestricted	2,255,346	220,444	2,475,790
Total net position	$ 8,705,551	$ 5,511,533	14,217,084
Reconciliation with business-type activities in the statement of net position:			
Long-term membership fee payable to New River Valley Regional Water Authority legally paid by the County but financed ultimately by enterprise funds revenues.			(1,187,996)
			$ 13,029,088

The Notes to Financial Statements are an integral part of this statement.

EXHIBIT 4

MONTGOMERY COUNTY PUBLIC SERVICE AUTHORITY

STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION – PROPRIETARY FUNDS
For the Year Ended June 30, 2018

	Water	Wastewater	Total
OPERATING REVENUES			
Charges for services:			
Water revenues	$ 1,861,703	$ -	$ 1,861,703
Wastewater revenues	-	1,402,386	1,402,386
Penalty and reconnection charges	44,638	19,691	64,329
Fees	267,059	125,713	392,772
Miscellaneous	13,126	2,485	15,611
Total operating revenues	2,186,526	1,550,275	3,736,801
OPERATING EXPENSES			
Salaries and wages	496,129	392,172	888,301
Employee benefits	170,452	106,388	276,840
Utilities and telephone	34,945	70,008	104,953
Water and wastewater services	734,331	490,516	1,224,847
Operating supplies, fees, and permits	28,360	41,957	70,317
Professional services	140,343	35,375	175,718
Repairs and maintenance	91,680	97,424	189,104
Insurance	19,915	15,479	35,394
Vehicle supplies and maintenance	28,514	17,858	46,372
Bad debts	5,626	(1,143)	4,483
Office supplies and miscellaneous	37,944	2,522	40,466
Membership fees	47,523	-	47,523
Depreciation	423,472	455,927	879,399
Total operating expenses	2,259,234	1,724,483	3,983,717
Operating loss	(72,708)	(174,208)	(246,916)
NONOPERATING REVENUES (EXPENSES)			
Investment earnings	19,955	-	19,955
Facility fees	390,000	495,250	885,250
Gain on sale of surplus property	-	2,372	2,372
Interest expense	(77,307)	(47,946)	(125,253)
Total nonoperating revenues	332,648	449,676	782,324
Change in net position	259,940	275,468	535,408
Total net position – beginning, as restated (Note 14)	8,445,611	5,236,065	13,681,676
Total net position – ending	$ 8,705,551	$ 5,511,533	$ 14,217,084
Reconciliation with business-type activities in the statement of activities:			
Change in net position			$ 535,408
Principal repayment on initial membership fee to New River Valley Regional Water Authority legally due from County but financed ultimately by enterprise fund revenues.			23,297
Change in net position of business-type activities			$ 558,705

The Notes to Financial Statements are an integral part of this statement.

EXHIBIT 5

MONTGOMERY COUNTY PUBLIC SERVICE AUTHORITY

STATEMENT OF CASH FLOWS – PROPRIETARY FUNDS
For the Year Ended June 30, 2018

	Water	Wastewater	Total
OPERATING ACTIVITIES			
Receipts from customers	$ 2,144,639	$ 1,528,932	$ 3,673,571
Payments to suppliers	(1,057,388)	(791,769)	(1,849,157)
Payments to employees	(690,598)	(565,957)	(1,256,555)
Payments to County for financial services	(71,771)	-	(71,771)
Net cash provided by operating activities	324,882	171,206	496,088
CAPITAL AND RELATED FINANCING ACTIVITIES			
Acquisition and construction of capital assets	(29,135)	(46,150)	(75,285)
Facility fee payments from customers	390,000	495,250	885,250
Proceeds from the sale of capital assets	-	2,372	2,372
Principal payments on long-term debt	(174,921)	(109,112)	(284,033)
Interest payments on debt	(77,495)	(48,058)	(125,553)
Net cash provided by capital and related financing activities	108,449	294,302	402,751
INVESTING ACTIVITIES			
Interest received	19,955	-	19,955
Net increase in cash and cash equivalents	453,286	465,508	918,794
CASH AND CASH EQUIVALENTS			
Beginning at July 1	2,200,286	29,330	2,229,616
Ending at June 30	$ 2,653,572	$ 494,838	$ 3,148,410
RECONCILIATION TO EXHIBIT 4			
Cash and cash equivalents	$ 2,609,202	$ 464,688	$ 3,073,890
Cash and cash equivalents, restricted	44,370	30,150	74,520
	$ 2,653,572	$ 494,838	$ 3,148,410
Reconciliation of operating loss to net cash provided by operating activities:			
Operating loss	$ (72,708)	$ (174,208)	$ (246,916)
Adjustments to reconcile operating loss to net cash provided by operating activities:			
Depreciation	423,472	455,927	879,399
Pension expense net of employer contributions	(34,681)	(65,932)	(100,613)
Other postemployment benefit expense net of employer contributions	4,192	4,008	8,200
Increase in accounts receivable	(39,651)	(23,306)	(62,957)
Decrease in due from wastewater fund	1,961	-	1,961
Increase in due from County	(949)	(3,163)	(4,112)
(Increase)/decrease in inventories	197	(540)	(343)
Increase/(decrease) in accounts payable and accrued expenses	38,814	(14,966)	23,848
Decrease in due to water fund	-	(1,961)	(1,961)
Decrease in due to County	(5,627)	-	(5,627)
Increase (decrease) in accrued payroll and related liabilities and compensated absences	6,472	(5,473)	999
Increase in customer deposits	3,390	820	4,210
Net cash provided by operating activities	$ 324,882	$ 171,206	$ 496,088

The Notes to Financial Statements are an integral part of this statement.

Note 1. Summary of Significant Accounting Policies

Reporting entity

The Montgomery County Public Service Authority (the "Authority") provides water and wastewater services for County of Montgomery, Virginia (the "County") residents and is treated as a discretely presented component unit of the County. The Authority is so classified because its members are appointed by the Board of Supervisors and the Authority does not provide financial benefit to or impose a financial burden on the County.

Measurement focus and 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.

The Authority distinguishes *operating* revenues and expenses from *nonoperating* items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with the Authority's principal ongoing operations. The principal operating revenues of the Authority are charges to customers for sales and services. Operating expenses include the cost of sales and services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

When both restricted and unrestricted resources are available for use, it is the Authority's policy to use restricted resources first, then unrestricted resources as they are needed.

The Authority reports the following major proprietary funds:

Water Fund – This fund accounts for the activities of the water department.
Wastewater Fund – This fund accounts for the activities of the wastewater department.

As a general rule, the effect of interfund activity has been eliminated from the government-wide financial statements.

Cash and cash equivalents

Cash and cash equivalents are considered to be cash on hand, demand deposits, and short-term investments with original maturities of three months or less from the date of acquisition.

Unbilled accounts receivable

Unbilled accounts receivable consist of amounts earned as of year end, but not yet billed because billing dates do not coincide with year end.

Allowance for uncollectible accounts

The Authority calculates its allowance for uncollectible accounts using historical collection data.

(Continued)

Note 1. Summary of Significant Accounting Policies (Continued)

Due from other governmental units

Due from other governmental units consists of funds due for reimbursement of grant expenditures.

Inventories

Inventories generally are recorded at cost using the first-in/first-out (FIFO) method.

Capital assets

Capital assets which include property, plant, and equipment are defined as assets with an initial, individual cost of more than $5,000 and an estimated useful life in excess of one year. Such assets are recorded at historical cost or estimated historical cost if purchased or constructed. Donated capital assets are recorded at estimated fair value at date of donation. The costs of normal maintenance and repairs that do not add to the value of the asset or materially extend assets' lives are expensed.

Capital assets are depreciated using the straight-line method over the following estimated useful lives:

Buildings	30-50 years
Mobile equipment	3-10 years
Other equipment	3-10 years
Wastewater systems	30-40 years
Water systems	30-40 years

Compensated absences

The Authority has a policy which allows for the accumulation and vesting of limited amounts of leave until termination or retirement.

Pensions and Other Postemployment Benefits (OPEB)

For purposes of measuring all financial statement elements related to pension and OPEB plans, information about the fiduciary net position of the Authority's Plans and the additions to/deductions from the Authority's 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.

(Continued)

Note 1. Summary of Significant Accounting Policies (Continued)

Net position

Net position is the difference between assets, deferred outflow of resources, liabilities, and deferred inflows of resources. Net investment 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 statements that present net position report a separate section for deferred outflows of resources. These items represent a consumption of net position that applies to future periods and so will not be recognized as an outflow of resources (expense) until then.

In addition to liabilities, the statements that present financial position report a separate section for deferred inflows of resources. These items represent an acquisition of net position that applies to future periods and so will not be recognized as an inflow of resources (revenue) until that time.

Estimates

Management uses estimates and assumptions in preparing its financial statements. Actual results could differ from those estimates.

Comparative data

The government-wide financial statements include certain prior year summarized comparative information in total but not presented at the level of detail required for a presentation in conformity with generally accepted accounting principles. Accordingly, such information should be read in conjunction with the Authority's financial statements for the prior year from which the summarized information was derived.

Note 2. Cash and Investments

Deposits

Deposits with banks are covered by the Federal Deposit Insurance Corporation (FDIC) and collateralized in accordance with the Virginia Security for Public Deposits Act (the "Act") Section 2.2-440 *et. seq*. of the *Code of Virginia.* Under the Act, banks and savings institutions holding public deposits in excess of the amount insured by the FDIC must pledge collateral to the Commonwealth of Virginia Treasury Board. Financial institutions may choose between two collateralization methodologies and depending upon that choice, will pledge collateral that ranges in amount from 50% to 130% of excess deposits. Accordingly, all deposits are considered fully collateralized.

Restricted assets

Restricted cash and cash equivalents consist of customer deposits.

(Continued)

Note 3. Accounts Receivable, Net

Accounts receivable consists of the following:

	Water	Wastewater	Total
Billed	$ 145,510	$ 114,265	$ 259,775
Unbilled	261,019	178,843	439,862
Allowance for uncollectible accounts	(23,000)	(18,000)	(41,000)
	$ 383,529	$ 275,108	$ 658,637

Note 4. Capital Assets

Capital asset activity for the year was as follows:

	Beginning Balance, restated	Increases	Decreases	Ending Balance
Capital assets, not depreciated				
Land, improvements, and rights	$ 340,389	$ -	$ -	$ 340,389
Construction in progress	-	29,135	-	29,135
Intangible asset (Note 8)	877,000	-	-	877,000
Total capital assets, not depreciated	1,217,389	29,135	-	1,246,524
Capital assets, being depreciated				
Buildings	267,622	-	-	267,622
Mobile equipment	528,948	-	35,300	493,648
Other equipment	967,135	46,150	7,855	1,005,430
Wastewater systems	17,264,639	-	-	17,264,639
Water systems	15,216,222	-	-	15,216,222
Total capital assets, being depreciated	34,244,566	46,150	43,155	34,247,561
Less accumulated depreciation				
Buildings	126,702	14,294	-	140,996
Mobile equipment	390,354	34,943	35,300	389,997
Other equipment	407,731	36,176	7,855	436,052
Wastewater systems	9,955,974	414,142	-	10,370,116
Water systems	7,111,075	379,844	-	7,490,919
Total accumulated depreciation	17,991,836	879,399	43,155	18,828,080
Total capital assets being depreciated, net	16,252,730	(833,249)	-	15,419,481
Total capital assets, net	$ 17,470,119	$ (804,114)	$ -	$ 16,666,005

(Continued)

Note 5. Long-Term Liabilities

The following is a summary of changes in long-term liabilities for the year:

	Beginning Balance	Issuances	Retirements	Ending Balance	Due within One Year
Revenue bonds	$ 5,153,744	$ -	$ 279,588	$ 4,874,156	$ 286,516
Note Payable	55,000	-	4,445	50,555	4,652
Membership fee payable (Note 10)	1,211,293	-	23,297	1,187,996	23,763
Compensated absences	178,464	123,466	124,925	177,005	123,903
	$ 6,598,501	$ 123,466	$ 432,255	$ 6,289,712	$ 438,834

The annual requirements to amortize long-term debt and related interest are as follows:

	Revenue Bonds		Note Payable		Membership Fee Payable	
Fiscal Year	Principal	Interest	Principal	Interest	Principal	Interest
2019	$ 286,516	$ 116,214	$ 4,652	$ 2,204	$ 23,763	$ 23,760
2020	293,613	109,115	4,868	1,988	24,238	23,285
2021	300,889	101,840	5,094	1,762	24,723	22,800
2022	308,344	94,385	5,331	1,525	25,217	22,305
2023	315,984	86,745	5,579	1,277	25,721	21,801
2024 – 2028	1,701,310	312,335	25,031	2,394	136,532	101,080
2029 – 2033	1,667,500	94,379	-	-	150,742	86,870
2034 – 2038	-	-	-	-	166,432	71,181
2039 – 2043	-	-	-	-	183,754	53,858
2044 – 2048	-	-	-	-	202,879	34,733
2049 – 2053	-	-	-	-	223,995	13,617
	$ 4,874,156	$ 915,013	$ 50,555	$ $ 11,150	$ $1,187,996	$ 475,290

Details of long-term indebtedness are as follows:

	Issue Date	Maturity Date	Authorized and Issued	Interest Rate	Amount Outstanding
Revenue Bonds:					
Water and Sewer Refunding Bond, 2013	03/28/2013	2032	$ 6,275,000	2.45%	$ 4,874,156
Loans Payable:					
Southeast Rural Community Assistance Project, Inc.:					
Rural Development I	05/31/2017	2027	$ 41,250	4.55%	$ 37,916
Southeast RCAP Loan	05/31/2017	2027	13,750	4.55	12,639
			$ 55,000		$ 50,555

(Continued)

Note 6. Defined Benefit Pension Plan

Plan Description

All full-time, salaried permanent employees of the Montgomery County Public Service Authority, (the "Political Subdivision") are automatically covered by the VRS Retirement Plan upon employment. This multi-employer agent 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 a different eligibility criteria. The specific information for each plan and the eligibility for covered groups within each plan are as follows:

Plan 1 – Plan 1 is a defined benefit plan. The retirement benefit is based on a member's age, creditable service, and average final compensation at retirement using a formula. Employees are eligible for Plan 1 if their membership date is before July 1, 2010, and they were vested as of January 1, 2013 and have not taken a refund.

- **Hybrid Opt-In Election –** VRS non-hazardous duty covered Plan 1 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014. The Hybrid Retirement Plan's effective date for eligible Plan 1 members who opted in was July 1, 2014. If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement Plan. Members who were eligible for an optional retirement plan (ORP) and had prior service under Plan 1 were not eligible to elect the Hybrid Retirement Plan and remain as Plan 1 or ORP.
- **Retirement Contributions –** Employees contribute 5.00% of their compensation each month to their member contribution account through a pre-tax salary reduction. Member contributions are tax-deferred until they are withdrawn as part of a retirement benefit or as a refund. The employer makes a separate actuarially determined contribution to VRS for all covered employees. VRS invests both member and employer contributions to provide funding for the future benefit payment.
- **Creditable Service –** Creditable service includes active service. Members earn creditable service for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional creditable service the member was granted. A member's total creditable service is one of the factors used to determine their eligibility for retirement and to calculate their retirement benefit. It also may count toward eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit.

(Continued)

Note 6. Defined Benefit Pension Plan (Continued)

Plan Description (Continued)

Plan 1 (Continued)

- **Vesting –** Vesting is the minimum length of service a member needs to qualify for a future retirement benefit. Members become vested when they have at least five years (60 months) of creditable service. Vesting means members are eligible to qualify for retirement if they meet the age and service requirements for their plan. Members also must be vested to receive a full refund of their member contribution account balance if they leave employment and request a refund. Members are always 100% vested in the contributions that they make.
- **Calculating the Benefit –** The Basic Benefit is calculated based on a formula using the member's average final compensation, a retirement multiplier, and total service credit at retirement. It is one of the benefit payout options available to a member at retirement. An early retirement reduction factor is applied to the Basic Benefit if the member retires with a reduced retirement benefit or selects a benefit payout option other than the Basic Benefit.
- **Average Final Compensation –** A member's average final compensation is the average of the 36 consecutive months of highest compensation as a covered employee.
- **Service Retirement Multiplier –** The retirement multiplier is a factor used in the formula to determine a final retirement benefit. The retirement multiplier for non-hazardous duty members is 1.70%.
- **Normal Retirement Age –** Age 65.
- **Earliest Unreduced Retirement Eligibility –** Age 65 with at least five years (60 months) of creditable service or at age 50 with at least 30 years of creditable service.
- **Earliest Reduced Retirement Eligibility –** Age 55 with at least five years (60 months) of creditable service or age 50 with at least 10 years of creditable service.
- **Cost-of-Living Adjustment (COLA) in Retirement –** The Cost-of-Living Adjustment (COLA) matches the first 3.00% increase in the Consumer Price Index for all Urban Consumers (CPI-U) and half of any additional increase (up to 4.00%) up to a maximum COLA of 5.00%.
  - **Eligibility –** For members who retire with an unreduced benefit or with a reduced benefit with at least 20 years of creditable service, the COLA will go into effect on July 1 after one full calendar year from the retirement date. For members who retire with a reduced benefit and who have less than 20 years of creditable service, the COLA will go into effect on July 1 after one calendar year following the unreduced retirement eligibility date.

Note 6. Defined Benefit Pension Plan (Continued)

Plan Description (Continued)

Plan 1 (Continued)

- **Cost-of-Living Adjustment (COLA) in Retirement (Continued)**
  - **Exceptions to COLA Effective Dates** – The COLA is effective July 1 following one full calendar year (January 1 to December 31) under any of the following circumstances:
    - The member is within five years of qualifying for an unreduced retirement benefit as of January 1, 2013.
    - The member retires on disability.
    - The member retires directly from short-term or long-term disability under the Virginia Sickness and Disability Program (VSDP).
    - The member is involuntarily separated from employment for causes other than job performance or misconduct and is eligible to retire under the Workforce Transition Act or the Transitional Benefits Program.
    - The member dies in service and the member's survivor or beneficiary is eligible for a monthly death-in-service benefit. The COLA will go into effect on July 1 following one full calendar year (January 1 to December 31) from the date the monthly benefit begins.
- **Disability Coverage** – Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.70% 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 toward vesting, eligibility for retirement and the health insurance credit. Only active members are eligible to purchase prior service. Members also may be eligible to purchase periods of leave without pay.

Note 6. Defined Benefit Pension Plan (Continued)

Plan Description (Continued)

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. Employees are eligible for 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.
- **Retirement Contributions –** Employees contribute 5.00% of their compensation each month to their member contribution account through a pre-tax salary reduction.
- **Creditable Service –** Same as Plan 1.
- **Vesting –** Same as Plan 1.
- **Calculating the Benefit –** See definition under Plan 1.
- **Average Final Compensation –** A member's average final compensation is the average of their 60 consecutive months of highest compensation as a covered employee.
- **Service Retirement Multiplier –** Same as Plan 1 for service earned, purchased, or granted prior to January 1, 2013. For non-hazardous duty members the retirement multiplier is 1.65% for creditable service earned, purchased, or granted on or after January 1, 2013.
- **Normal Retirement Age –** Normal Social Security retirement age.
- **Earliest Unreduced Retirement Eligibility –** Normal Social Security retirement age with at least five years (60 months) of creditable service or when their age and service equal 90.
- **Earliest Reduced Retirement Eligibility –** Age 60 with at least five years (60 months) of creditable service.
- **Cost-of-Living Adjustment (COLA) in Retirement –** The Cost-of-Living Adjustment (COLA) matches the first 2.00% increase in the CPI-U and half of any additional increase (up to 2.00%), for a maximum COLA of 3.00%.
    - **Eligibility** – Same as Plan 1.

Note 6. Defined Benefit Pension Plan (Continued)

Plan Description (Continued)

Plan 2 (Continued)

- **Cost-of-Living Adjustment (COLA) in Retirement (Continued)**
  - **Exceptions to COLA Effective Dates** – Same as Plan 1.
- **Disability Coverage –** Same as Plan 1 except that the retirement multiplier is 1.65%.
- **Purchase of Prior Service –** Same as Plan 1.

Hybrid Retirement Plan – The Hybrid Retirement Plan combines the features of a defined benefit plan and a defined contribution plan. Most members hired on or after January 1, 2014 are in this plan, as well as Plan 1 and Plan 2 members who were eligible and opted into the plan during a special election window. The defined benefit is based on a member's age, creditable service, and average final compensation at retirement using a formula. The benefit from the defined contribution component of the plan depends on the member and employer contributions made to the plan and the investment performance of those contributions. In addition to the monthly benefit payment payable from the defined benefit plan at retirement, a member may start receiving distributions from the balance in the defined contribution account, reflecting the contributions, investment gains or losses, and any required fees.

- **Eligible Members –** Employees are in the Hybrid Retirement Plan if their membership date is on or after January 1, 2014. This includes political subdivision employees; members in Plan 1 or Plan 2 who elected to opt into the plan during the election window held January 1 through April 30, 2014; the plan's effective date for opt-in members was July 1, 2014.
- **Non-Eligible Members –** Some employees are not eligible to participate in the Hybrid Retirement Plan. They include political subdivision employees who are covered by enhanced benefits for hazardous duty employees. Those employees eligible for an optional retirement plan (ORP) must elect the ORP plan or the Hybrid Retirement Plan. If these members have prior service under Plan 1 or Plan 2, they are not eligible to elect the Hybrid Retirement Plan and must select Plan 1 or Plan 2 (as applicable) or ORP.
- **Retirement Contributions –** A member's retirement benefit is funded through mandatory and voluntary contributions made by the member and the employer to both the defined benefit and the defined contribution components of the plan. Mandatory contributions are based on a percentage of the employee's creditable compensation and are required from both the member and the employer. Additionally, members may choose to make voluntary contributions to the defined contribution component of the plan, and the employer is required to match those voluntary contributions according to specified percentages.

(Continued)

Note 6. Defined Benefit Pension Plan (Continued)

Plan Description (Continued)

Hybrid Retirement Plan (Continued)

- **Creditable Service –**
  - **Defined Benefit Component –** Under the defined benefit component of the plan, creditable service includes active service. Members earn credible 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 credible service the member was granted. A member's total creditable service is one of the factors used to determine their eligibility for retirement and to calculate their retirement benefit. It also may count toward eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit.
  - **Defined Contributions Component –** Under the defined contribution component, creditable service is used to determine vesting for the employer contribution portion of the plan.
- **Vesting –**
  - **Defined Benefit Component –** Defined benefit vesting is the minimum length of service a member needs to qualify for a future retirement benefit. Members are vested under the defined benefit component of the Hybrid Retirement Plan when they reach five years (60 months) of creditable service. Plan 1 or Plan 2 members with at least five years (60 months) of creditable service who opted into the Hybrid Retirement Plan remain vested in the defined benefit component.
  - **Defined Contributions Component –** Defined contribution vesting refers to the minimum length of service a member needs to be eligible to withdraw the employer contributions from the defined contribution component of the plan. Members are always 100% vested in the contributions that they make. Upon retirement or leaving covered employment, a member is eligible to withdraw a percentage of employer contributions to the defined contribution component of the plan, based on service. After two years, a member is 50% vested and may withdraw 50% of employer contributions. After three years, a member is 75% vested and may withdraw 75% of employer contributions. After four or more years, a member is 100% vested and may withdraw 100% of employer contributions. Distribution is not required by law until age 70½.
- **Calculating the Benefit –**
  - **Defined Benefit Component –** See definition under Plan 1.
  - **Defined Contribution Component –** The benefit is based on contributions made by the member and any matching contributions made by the employer, plus net investment earnings on those contributions.
- **Average Final Compensation –** Same as Plan 2 for the defined benefit component of the plan.

(Continued)

Note 6. Defined Benefit Pension Plan (Continued)

Plan Description (Continued)

Hybrid Retirement Plan (Continued)

- **Service Retirement Multiplier –** The retirement multiplier for the defined benefit component is 1.00%. For members who opted into the Hybrid Retirement Plan from Plan 1 or Plan 2, the applicable multipliers for those plans will be used to calculate the retirement benefit for service credited in those plans.
- **Normal Retirement Age –**
  - **Defined Benefit Component –** Same as Plan 2.
  - **Defined Contribution Component –** Members are eligible to receive distributions upon leaving employment, subject to restrictions.
- **Earliest Unreduced Retirement Eligibility –**
  - **Defined Benefit Component –** Normal Social Security retirement age and have at least five years (60 months) of creditable service or when their age and service equal 90.
  - **Defined Contribution Component –** Members are eligible to receive distributions upon leaving employment, subject to restrictions.
- **Earliest Reduced Retirement Eligibility –**
  - **Defined Benefit Component –** Members may retire with a reduced benefit as early as age 60 with at least five years (60 months) of creditable service.
  - **Defined Contribution Component –** Members are eligible to receive distributions upon leaving employment, subject to restrictions.
- **Cost-of-Living Adjustment (COLA) in Retirement –**
  - **Defined Benefit Component –** Same as Plan 2.
  - **Defined Contribution Component –** Not Applicable.
  - **Eligibility –** Same as Plan 1 and 2.
  - **Exceptions to COLA Effective Dates –** Same as Plan 1 and 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.

(Continued)

Note 6. Defined Benefit Pension Plan (Continued)

Plan Description (Continued)

Hybrid Retirement Plan (Continued)

- **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

The employees of the Authority are also employees of the County, as such, they are included in the employee information included in the County's CAFR.

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.

The political subdivision's contractually required contribution rate for the year ended June 30, 2018 was 11.16% 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 $89,373 and $114,713 for the years ended June 30, 2018 and June 30, 2017, respectively.

Net Pension Liability

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

Note 6. Defined Benefit Pension Plan (Continued)

Actuarial Assumptions

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	2.50%
General Employees – Salary increases, including inflation	3.50 – 5.35%
Investment rate of return	7.00%, net of pension plan investment expense, including inflation*

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

Mortality rates: General employees – 15 to 20% of deaths are assumed to be service related. Mortality is projected using the applicable RP-2014 Mortality Table Projected to 2020 with various set backs or set forwards for both 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 period from July 1, 2012 through June 30, 2016. Changes to the actuarial assumptions as a result of the experience study are as follows:

General Employees – Largest 10 – Non-Hazardous Duty and All Others (Non 10 Largest): Update mortality table; lowered retirement rates at older ages, changed final retirement from 70 to 75; lowered disability rates, no change to salary scale, increased rate of line of duty disability from 14% to 20%.

Note 6. Defined Benefit Pension Plan (Continued)

Long-Term Expected Rate of Return

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

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

* The above allocation provides for 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 rate of 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 2.5%.

(Continued)

Note 6. Defined Benefit Pension Plan (Continued)

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, 2016, 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

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) – (b)
Balances at June 30, 2016	$ 4,004,380	$ 3,238,055	$ 766,325
Changes for the year:			
Service cost	120,905	-	120,905
Interest	333,871	-	333,871
Benefit changes	-	-	-
Differences between expected and actual experience	(33,500)	-	(33,500)
Assumption changes	(30,651)	-	(30,651)
Contributions – employer	-	114,713	(114,713)
Contributions – employee	-	50,449	(50,449)
Net investment income	-	481,516	(481,516)
Benefit payments, including refunds of employee contributions	(220,309)	(220,309)	-
Refunds of employee contributions	-	-	-
Administrative expenses	-	(2,782)	2,782
Other changes	-	(428)	428
Net changes	170,316	423,159	(252,843)
Balances at June 30, 2017	$ 4,174,696	$ 3,661,214	$ 513,482

Note 6. Defined Benefit Pension Plan (Continued)

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% Decrease (6.00%)	Current Discount Rate (7.00%)	1.00% Increase (8.00%)
Political subdivision's net pension liability	$ 1,028,659	$ 513,482	$ 86,932

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 $35,206. At June 30, 2018, the political subdivision reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ -	$ 41,870
Change in assumptions	-	16,036
Net difference between projected and actual earnings on pension plan investments	-	49,508
Employer contributions subsequent to the measurement date	89,373	-
Total	$ 89,373	$ 107,414

Note 6. Defined Benefit Pension Plan (Continued)

Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions (Continued)

The $89,373 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 year ended 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 as follows:

Year Ending June 30,	Reduction to Pension Expense
2019	$ (64,066)
2020	(9,204)
2021	(2,404)
2022	(31,740)
2023	-
Thereafter	-

Pension Plan Data

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

Note 7. Other Postemployment Benefits Liability – Local Plan

Plan Description and Benefits Provided

The Authority provides postemployment medical and dental benefits to its retirees and their eligible dependents who elect to stay in the plans. At retirement, retirees may stay in one of three health plans with an additional choice of staying in one of two dental plans and can continue coverage under all the benefits becoming eligible for Medicare or death, whichever comes first, under a single-employer plan. The retiree pays the premium for these benefits. The County may change, add, or delete benefits (including contributions required of retired employees) as deemed appropriate.

Participants are eligible for the plan at age 50 if they have completed ten years of service, or at age 55 if they have completed five years of service. Retiring employees must have been permanent active employees and have coverage in effect when they retire.

(Continued)

Note 7. Other Postemployment Benefits Liability – Local Plan (Continued)

Employees Covered by Benefit Terms

The employees of the Authority are also employees of the County, as such, they are included in the employee information included in the County's CAFR.

Total OPEB Liability

The Authority's total OPEB liability of $209,196 was measured as of June 30, 2018 and was determined based on an actuarial valuation performed as of June 30, 2017.

Actuarial Assumptions and other inputs

The total OPEB liability was determined using the following assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation	2.50%
Salary increases, including inflation	3.5% - 5.35%
Healthcare cost trend rates	4.2% - 6.5%
Retirees' share of benefit-related costs	100%

Mortality rates: .016% -11.9%

The actuarial assumptions used in the June 30, 2017 valuation were based on the results of VRS experience studies for the period from July 1, 2012 through June 30, 2016.

There were no changes in benefit terms in the current year.

Changes in assumptions and other inputs since the July 1, 2015 valuation include:

- The age-related claims costs used to estimate the true underlying cost of coverage for pre-65 retirees was updated to reflect medical changes since the prior valuation.
- The pre-Medicare healthcare trend assumption was changed from 5.10% for fiscal 2016, 6.20% for fiscal 2017, 6.80% for fiscal 2018, then grading to an ultimate rate of 4.40% for fiscal 2092 to 6.10% for fiscal 2018, 5.80% for fiscal 2019, 6.50% for fiscal 2020, then grading to an ultimate rate of 4.20% for fiscal 2100.
- The withdrawal, retirement, mortality, and disability assumptions were changed to be consistent with the assumptions used in the June 30, 2017 valuation of the Virginia Retirement System.
- The assumed percentage of future retirees electing to continue their medical coverage upon retirement was increased from 30% to 40%.
- The assumed percentage of future retirees electing to also cover their spouse was decreased from 30% to 25%.
- As required by GASB 75, the actuarial cost method was changed from projected unit credit to entry age normal (level percentage of pay).

(Continued)

Note 7. Other Postemployment Benefits Liability – Local Plan (Continued)

Changes in the Total OPEB Liability

Balance at June 30, 2017	$ 203,933
Changes for the year:	
Service cost	11,590
Interest	7,438
Assumption or other input changes	(7,686)
Benefit payments	(6,079)
Net changes	5,263
Balance at June 30, 2018	$ 209,196

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

The following presents the total OPEB liability of the Authority , as well as what the Authority's total OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (2.87%) or one percentage point higher (4.87%) than the current discount rate:

	1.00% Decrease (2.87%)	Current Discount Rate (3.87%)	1.00% Increase (4.87%)
Total OPEB liability	$ 203,739	$ 209,196	$ 189,998

Sensitivity of the Total OPEB Liability to Changes in the Healthcare Cost Trend Rates

The following presents the total OPEB liability of the Authority, as well as what the Authority's total OPEB liability would be if it were calculated using healthcare cost trend rates that are one percentage point lower or one percentage point higher than the current healthcare cost trend rates:

	1.00% Decrease	Current Healthcare Cost Trend Rates	1.00% Increase
Total OPEB liability	$ 183,898	$ 209,196	$ 239,084

(Continued)

Note 7. Other Postemployment Benefits Liability – Local Plan (Continued)

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

For the year ended June 30, 2018, the Authority recognized OPEB expense of $17,881. At June 30, 2018, the political subdivision reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Change in assumptions	$ -	$ 6,539
Total	$ -	$ 6,539

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

Year Ending June 30,	Increase (Reduction) to OPEB Expense
2019	$ (1,147)
2020	(1,147)
2021	(1,147)
2022	(1,147)
2023	(1,147)
Thereafter	(804)

Note 8. Other Postemployment Benefits Liability – Virginia Retirement System Plans

In addition to their participation in the pension plans offered through the Virginia Retirement System (VRS), the Authority also participates in a cost-sharing and agent multi-employer other postemployment benefit plan, described as follows:

Plan Description

Group Life Insurance Program

All employees of political subdivisions are automatically covered by the VRS Group Life Insurance (GLI) Program upon employment.

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 GLI Program OPEB.

Specific information for the GLI is available at https://www.varetire.org/members/benefits/life-insurance/basic-group-life-insurance.asp

Contributions

Contributions to the VRS OPEB program were based on actuarially determined rates from actuarial valuations as of June 30, 2015. The actuarially determined rates were expected to finance the cost of benefits earned by employees during the year, with an additional amount to fund any unfunded accrued liability. Specific details related to the contributions for the VRS OPEB program is as follows:

Group Life Insurance Program

Governed by:	*Code of Virginia* 51.1-506 and 51.1-508 and may be impacted as a result of funding provided to school divisions and governmental agencies by the Virginia General Assembly.
Total rate:	1.31% of covered employee compensation. Rate allocated 60/40; 0.79% employee and 0.52% employer. Employers may elect to pay all or part of the employee contribution.
June 30, 2018 Contribution	$ 4,259
June 30, 2017 Contribution	$ 4,176

Note 8. Other Postemployment Benefits Liability – Virginia Retirement System Plans (Continued)

OPEB Liability, OPEB Expense and Deferred Inflows and Outflows of Resources Related to OPEB

The net OPEB liability was measured as of June 30, 2017 and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of that date. The covered employer's proportion of the net OPEB liability was based on the covered employer's actuarially determined employer contributions for the year ended June 30, 2017 relative to the total of the actuarially determined employer contributions for all participating employers.

Group Life Insurance Program

June 30, 2018 proportionate share of liability	$ 65,534
June 30, 2017 proportion	.09528 %
June 30, 2016 proportion	.09679 %
June 30, 2018 expense	$ 548

Since there was a change in proportionate share between measurement dates, a portion of the OPEB expense above was related to deferred amount from changes in proportion.

At June 30, 2018, the Authority reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources.

Group Life Insurance Program

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ -	$ 1,462
Change in assumptions	-	3,382
Net difference between projected and actual earnings on OPEB plan investments	-	2,468
Changes in proportion	-	1,005
Employer contributions subsequent to the measurement date	4,258	-
Total	$ 4,258	$ 8,317

(Continued)

Note 8. Other Postemployment Benefits Liability – Virginia Retirement System Plans (Continued)

OPEB Liability, OPEB Expense and Deferred Inflows and Outflows of Resources Related to OPEB (Continued)

The deferred outflows of resources related to OPEB resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction of the net OPEB liability in the year ended June 30, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Group Life Insurance Program

Year Ending June 30,	Increase (Reduction) to OPEB Expense
2019	$ 1,713
2020	1,713
2021	1,713
2022	1,713
2023	1,010
Thereafter	455

Note 8. Other Postemployment Benefits Liability – Virginia Retirement System Plans (Continued)

Actuarial Assumptions and Other Inputs

The total OPEB liability was determined using the following assumptions based on an actuarial valuation date of June 30, 2016, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2017:

Inflation	2.5%
Salary increases, including inflation:	
• Locality – general employees	3.5 – 5.35%
Healthcare cost trend rates:	
• Under age 65	7.75 – 5.00%
• Ages 65 and older	5.75 – 5.00%
Investment rate of return, net of expenses, including inflation*	GLI: 7.0%

* 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 rate for GASB purposes of slightly more than the assumed percent above. However, since the difference was minimal, and a more conservative 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 the percent noted above to simplify preparation of OPEB liabilities.

Mortality rates used for the various VRS OPEB plans are the same as those used for the actuarial valuations of the VRS pension plans. The mortality rates are discussed in detail at Note 6.

Note 8. Other Postemployment Benefits Liability – Virginia Retirement System Plans (Continued)

Net OPEB Liabilities

The net OPEB liability represent 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, net OPEB liability amount for the VRS OPEB program is as follows (amounts expressed in thousands):

	Group Life Insurance Program
Total OPEB Liability	$ 2,942,426
Plan fiduciary net position	1,437,586
Employers' net OPEB liability (asset)	$ 1,504,840
Plan fiduciary net position as a percentage of total OPEB liability	48.86%

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

Note 8. Other Postemployment Benefits Liability – Virginia Retirement System Plans (Continued)

Long-Term Expected Rate of Return

Group Life Insurance

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

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

* The above allocation provides for 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 rate of 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 2.5%.

Note 8. Other Postemployment Benefits Liability – Virginia Retirement System Plans (Continued)

Discount Rate

The discount rate used to measure the GLI OPEB 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 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 employer for the OPEB liabilities 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 OPEB plans' 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 OPEB liability.

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

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

	1.00% Decrease (6.00%)	Current Discount Rate (7.00%)	1.00% Increase (8.00%)
GLI Net OPEB liability	$ 84,761	$ 65,534	$ 49,947

OPEB Plan Fiduciary Net Position

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

Note 9. Service Contracts

The Authority maintains contracts for water purchase and sewer treatment services with the following organizations:

New River Valley Regional Water Authority
Blacksburg VPI Sanitation Authority
Pepper's Ferry Regional Wastewater Treatment Authority

(Continued)

Note 9. Service Contracts (Continued)

During June 2013, Montgomery County joined the New River Valley Regional Water Authority (the "Water Authority"). While Montgomery County is the legal member of the Water Authority, all benefits or costs associated with the membership will be enjoyed by or paid with revenues of the Authority. The Authority paid a one-time $1,300,000 membership fee which was financed over forty years (Note 5). As part of the water agreement, and in exchange for the rights to acquire water from the Water Authority, the Authority transferred a section of pipe with an estimated value of $877,000 to the Water Authority (Note 4). This exchange created an intangible asset of equal value with an indefinite useful life that will be evaluated annually for impairment. The transfer of the pipe occurred in 2014.

During 2014, in accordance with joining the Water Authority, the Authority agreed to pay for a transitional meter setting with an estimated cost of $120,000; however, this had not occurred at year end. The transitional meter setting is expected to be completed during fiscal year 2019. The Authority will also be responsible for capital upgrades with an estimated cost of $4,221,000. The design work of the capital upgrades began in fiscal year 2018 and is still in process. $29,135 in capital upgrades were included in Construction in Progress at June 30, 2018.

Note 10. Risk Management

General liability and other

The Authority is exposed to various risks of loss related to torts, theft of, damage to, and destruction of assets; errors and omissions; and natural disasters. The Authority participates with other localities in the Virginia Association of Counties Liability Pool for its coverage of general liability, auto insurance, and workers' compensation. Each member of this public risk pool jointly and severally agrees to assume, pay, and discharge any liability. The Authority pays the contributions and assessments based upon classification and rates into a designated cash reserve fund out of which expenses of the pool, claims and awards are to be paid. In the event of a loss deficit and depletion of all available excess insurance, the pool may assess all members in the proportion in which the premium of each bears to the total premiums of all members in the year in which such deficit occurs. The Authority carries commercial insurance for all other risks of loss. Settled claims resulting from these risks have not exceeded commercial insurance coverage in the last three years and there have not been any significant reductions in insurance coverage from the previous year.

Health benefits

The County of Montgomery is self-insured. The Authority pays a fixed per employee monthly premium to the County for health coverage. The claims incurred, claims paid, and incurred but not reported information can be found in the comprehensive annual financial report of the County.

Note 11. Related Party Transactions

The County serves as paymaster and performs other financial services for the Authority including billing customers, processing payments, paying invoices, reconciling bank statements, and maintaining and reconciling the general ledger. The County bills the Authority for these services based on the actual time incurred. The cost of these services for the year, $66,144, is included in professional services.

The County provides office space to the Authority at no charge. At year end, the Authority has a balance of $5,145 due to the County for financial services provided. At year end, the Authority has a balance of $14,797 due from the County for monthly insurance premiums paid in advance and $3,405 due from the County for the sale of surplus property.

Note 12. Concentrations

Two customers provide approximately nine percent each of operating revenue.

Note 13. Commitments and Contingencies

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.

Note 14. Adoption of New Standard and Prior Period Restatement

In the current year the Authority adopted GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. This standard replaces the requirements of GASB Statement No. 45 as it relates to governments that provide postemployment benefits other than pensions. The new Statement requires governments providing defined benefit postemployment benefits to recognize the long-term obligation for those benefits as a liability for the first time, and to more comprehensively and comparably measure the annual costs of other postemployment benefits. The Statement also enhances accountability and transparency through revised and new note disclosures and required supplementary information, including disclosing descriptive information about the types of benefits provided, how contributions to the plans are determined, and assumptions and methods used to calculate the liability.

In the current year, the Authority determined that a fixed asset had been recorded in a prior year in error.

Comparative prior year information, to the extent presented, has not been restated because the necessary information is not available.

Note 14. Adoption of New Standard and Prior Period Restatement (Continued)

The following is a summary of the restatements to net position, as applicable, resulting from the adoption of GASB Statement No. 75:

	Business-Type Activites	Water	Wasterwater
Net position July 1, 2017, as previously reported	$ 12,571,090	$ 8,509,803	$ 5,272,580
Recognition of other postemployment benefit related liabilities and related deferred outflows/inflows in accordance with GASB No. 75- Local	(8,771)	(4,609)	(4,162)
Recognition of other postemployment benefit related liabilities and related deferred outflows/inflows in accordance with GASB No. 75-VRS	(73,194)	(40,841)	(32,353)
Removal of capital asset incorrectly capitalized	(18,742)	(18,742)	-
Net position July 1, 2017, as restated	$ 12,470,383	$ 8,445,611	$ 5,236,065

Note 15. New Accounting Standards

The Governmental Accounting Standards Board (GASB) has issued the following Statements which are not yet effective.

The GASB issued **Statement No. 83**, *Certain Asset Retirement Obligations* in November 2016. This Statement establishes criteria for determining the timing and pattern of recognition of a liability and a corresponding deferred outflow of resources for asset retirement obligations. The requirements of this Statement are effective for periods beginning after June 15, 2018.

The GASB issued **Statement No. 84**, *Fiduciary Activities* in January 2017. This Statement establishes standards of accounting and financial reporting for fiduciary activities. The requirements of this Statement are effective for periods beginning after December 15, 2018.

The GASB issued **Statement No. 87**, *Leases* in June 2017. This Statement establishes standards of accounting and financial reporting for leases by lessees and lessors. The requirements of this Statement are effective for periods beginning after December 15, 2019.

The GASB issued **Statement No. 88**, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements* in March 2018. This Statement improves the information that is disclosed in notes to government financial statements related to debt, including direct borrowing and direct placements. It also clarifies which liabilities governments should include when disclosing information related to debt. This Statement defines debt for purposes of disclosure in notes to financial statements as a liability that arises from a contractual obligation to pay cash (or other assets that may be used in lieu of cash) in one or more payments to settle an amount that is fixed at the date the contractual obligation is established. The requirements of this Statement are effective for periods beginning after June 15, 2018.

(Continued)

Note 15. New Accounting Standards (Continued)

The GASB issued **Statement No. 89**, *Accounting for Interest Cost Incurred before the End of a Construction Period* in June 2018. This Statement enhances the relevance and comparability of information about capital assets and the cost of borrowing for a period and simplifies accounting for interest cost incurred before the end of a construction period. The requirements of this Statement are effective for periods beginning after December 15, 2019. The requirements of this Statement should be applied prospectively.

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

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

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

The requirements of this Statement are effective for periods beginning after December 15, 2018.The requirements should be applied retroactively, except for the provisions related to (1) reporting a majority equity interest in a component unit and (2) reporting a component unit if the government acquires a 100 percent equity interest. Those provisions should be applied on a prospective basis.

Management has not determined the effects these new GASB Statements may have on prospective financial statements.