# NORTHWESTERN REGIONAL JAIL AUTHORITY WINCHESTER, VIRGINIA FINANCIAL REPORT YEAR ENDED JUNE 30, 2018

# Winchester, Virginia

# Financial Report Year Ended June 30, 2018

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# Northwestern Regional Adult Detention Center

James F. Whitley - Superintendent



141 Fort Collier Road, Winchester, VA 22603 (540) 665-6374 (540) 665-1615 FAX

January 9, 2019

Northwestern Regional Jail Authority Regional Adult Detention Center 141 Fort Collier Road Winchester, VA 22603

Dear Jail Authority Members:

The Northwestern Regional Adult Detention Center Annual Financial Report for fiscal year 2018 is attached. To the best of our knowledge the data is accurate and accurately represents the financial position of the Regional Adult Detention Center in a fair and objective manner.

Beginning with the June 30, 2002 Comprehensive Financial Statement, Frederick County, Virginia implemented Governmental Accounting Standards Board (GASB) Statement Number 34, Basic Financial Statements and Management's Discussion and Analysis for State and Local Governments. GASB Statement Number 34 requires management to provide a narrative introduction, overview, and analysis to accompany the basic financial statements in the form of a Management Discussion and Analysis (MD&A). The Detention Center complies with the provisions of the Standard as a government entity under Frederick County, the Center's fiscal agent. This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it.

#### THE REPORTING ENTITY

The Northwestern Regional Adult Detention Center is a regional governmental agency, with representation from each participating jurisdiction, and is considered to be a jointly governed organization.

#### **ECONOMIC CONDITIONS AND OUTLOOK**

The Northwestern Regional Adult Detention Center is located in the Fort Collier Industrial Park, just northwest of Winchester, Virginia. Situated on a 33-acre parcel of land, the Detention Center complex consists of a Main Jail, an Annex Facility and a Community Corrections Center.

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Detention Center operations are funded by the four (4) participating jurisdictions based upon their individual utilization of facility beds over the three (3) previous complete years. Local contributions are augmented by state assistance in the area of salaries and inmate per diem. In addition, some fees are collected from inmates and their associated activities.

Detention Center expenses have increased in part to the rising inmate population, causing the Annex building to be re-opened after being closed for a number of years. The opening of that building required an increase in Overtime and the need for more Correctional Officers to operate effectively, causing increases each year in the contributions required of the participating jurisdictions.

#### FINANCIAL INFORMATION

Frederick County serves as the Jail's Fiscal Agent and the Jail's activities are included in the County's annual appropriated budget. The facility's internal control structure consists of a Captain of Administrative Services, with three accounting personnel, who oversee accounting operations and report financial data to Frederick County, the State of Virginia, and the Regional Jail Authority.

Open encumbrances are reported as reservations of fund balances since they do not constitute expenditures or liabilities. Encumbrances generally are re-appropriated as part of the following year's budget.

The Captain of Administrative Services oversees Inmate and Commissary Funds, and exercises control of the Inmate Benefit Program. Inmate funds include all monies accrued by inmates for their personal use, i.e. payment of their outside bills; family support; commissary purchases; and their telephone calls.

Commissary funds are profits accrued from inmate commissary purchases and are used to benefit inmates and their activities. These benefits include communal newspapers, television, microwaves, books, law library materials, games, sports equipment, exercise equipment, special rewards, programs designed to train, inform, or educate inmates, and a myriad of other programs.

# Northwestern Regional Adult Detention Center

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#### **ACKNOWLEDGEMENTS**

The sound financial condition enjoyed by the Regional Detention Center results, in part, from the dedication and commitment of the Detention Center accounting staff, the Frederick County Finance Department, the Regional Jail Authority, and the support of the participating jurisdictions and their governing bodies.

Respectfully,

James F. Whitley
Superintendent

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# ROBINSON, FARMER, COX ASSOCIATES

CERTIFIED PUBLIC ACCOUNTANTS

A PROFESSIONAL LIMITED LIABILITY COMPANY

#### Independent Auditors' Report

To the Members of the Board Northwestern Regional Jail Authority Winchester, Virginia

#### Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities of Northwestern Regional Jail Authority, 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.

#### Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America; 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 require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

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

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

#### **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the business-type activities of Northwestern Regional Jail 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 Principles

As described in Note 14 to the financial statements, in 2018, the Authority adopted new accounting guidance, GASB Statement Nos. 75 *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* and 85 *Omnibus 2017*. Our opinion is not modified with respect to this matter.

#### Restatement of Beginning Balances

As described in Note 14 to the financial statements, in 2018, the Authority restated beginning balances to reflect the requirements of GASB Statement No. 75. Our opinion is not modified with respect to this matter.

#### Other Matters

#### Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and schedules related to pension and OPEB funding on pages 4-6 and 49-55 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, which considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### Supplementary and Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise Northwestern Regional Jail Authority's basic financial statements. The other supplementary information is presented for purposes of additional analysis and is not a required part of the basic financial statements.

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

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 assurance on them.

#### **Report on Summarized Comparative Information**

We have previously audited Northwestern Regional Jail Authority's 2017 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated January 15, 2018. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2017, is consistent, in all material respects, with the audited financial statements from which it has been derived.

#### Other Reporting Required by Government Auditing Standards

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In accordance with *Government Auditing Standards*, we have also issued our report dated January 8, 2019, on our consideration of Northwestern Regional Jail 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 Northwestern Regional Jail 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 Northwestern Regional Jail Authority's internal control over financial reporting and compliance.

Charlottesville, Virginia

January 8, 2019

The following is a discussion and analysis of Northwestern Regional Jail Authority's financial performance for the fiscal year ended June 30, 2018. This information is in conjunction with the Superintendent's transmittal letter and included with the annual audit report.

#### Financial Highlights:

#### **Accrual Basis Statements**

At the end of the fiscal year, Northwestern Regional Jail Authority ("the Authority") reported an ending net position balance of \$12,061,763, an increase of \$1,676,548 from the prior year. Over time, increases and decreases in net position can serve as a useful indicator of whether the financial health of the Authority is improving or deteriorating.

The Authority holds long-term debt of \$16,754,455; consisting of Revenue Bonds payable in annual installments for 20 years and VRA Bonds payable in annual installments for 15 years. The Authority also has a net pension liability of \$5,105,950 and a net OPEB liability of \$1,109,103.

The following table shows a summary of the Statement of Net Position:

Table 1
Summary of Statement of Net Position
At June 30, 2018 and June 30, 2017

	J	une 30, 2018	 June 30, 2017
Current assets	\$	10,673,506	\$ 9,633,065
Capital assets		24,985,742	 25,945,008
Total assets	\$	35,659,248	\$ 35,578,073
Deferred outflows of resources	\$	2,809,812	\$ 3,869,019
Total assets and deferred outflows	\$	38,469,060	\$ 39,447,092
Current liabilities Noncurrent liabilities	\$	1,849,578 22,986,872	\$ 1,971,409 25,784,636
Total liabilities	\$	24,836,450	\$ 27,756,045
Deferred inflows of resources	\$	1,570,847	\$ 161,692
Net investment in capital assets Unrestricted	\$	9,554,447 2,507,316	\$ 9,570,797 1,958,558
Total net position	\$	12,061,763	\$ 11,529,355
Total liabilities, deferred inflows, and net position	\$	38,469,060	\$ 39,447,092

#### Modified Accrual and Budgetary Audit Statements

At the end of the fiscal year, the Authority reported an ending fund balance of \$10,219,293, an increase of \$1,193,158.

#### Overview:

Comparison of revenues and expenses from fiscal year 2017 to 2018 provide the following information:

#### **Accrual Basis Statements**

- Fiscal year 2018 revenues were \$21,536,243; fiscal year 2018 expenses were \$19,859,695, which included \$1,114,053 of depreciation expense, which is a noncash expense.
- Fiscal year 2017 revenues were \$20,831,622; fiscal year 2017 expenses were \$19,858,534, which included \$1,165,288 of depreciation expense, which is a noncash expense.

The following table shows a summary of the Statement of Revenues, Expenses, and Changes in Net Position:

Table 2
Summary of Statement of Revenues, Expenses and Changes in Net Position
Years Ended June 30, 2018 and June 30, 2017

	_ ,	June 30, 2018	June 30, 2017
Local and other per diems	\$	13,200,126	\$ 12,378,407
Commonwealth of Virginia jail costs		1,246,476	1,390,952
Other operating revenues		986,371	1,008,538
Commonwealth of Virginia State Compensation Board		5,450,677	5,469,107
Other nonoperating revenues		652,593	 584,618
Total revenues	\$_	21,536,243	\$ 20,831,622
Personnel and fringes	\$	14,426,895	\$ 14,100,055
Other operating expenses		4,889,380	5,167,336
Other nonoperating expenses		543,420	 591,143
Total expenses	\$	19,859,695	\$ 19,858,534
Change in net position	\$	1,676,548	\$ 973,088
Net position, beginning of year, as restated	_	10,385,215	 10,556,267
Net position, end of year	\$	12,061,763	\$ 11,529,355

#### Modified Accrual and Budgetary Basis Statements

- In fiscal year 2018, the Authority's revenues were \$21,536,243, an increase of \$721,698 from 2017 revenues of \$20,814,545.
- In fiscal year 2018, the Authority's expenditures were \$20,343,085, a decrease of \$1,427,350 from 2017 expenditures of \$21,770,435. The Authority incurred \$2,013,262 in capital outlay expenditures in 2017 which contributed to the increase in expenditures during the year.
- In fiscal year 2018, the Authority's revenues of \$21,536,243 were over expenditures of \$20,343,085 by \$1,193,158.

#### **Budgetary Overview**

In fiscal year 2018, the Authority's revenues of \$21,536,243 exceeded budgeted revenues of \$21,355,837 by \$180,406. The Authority's expenditures of \$20,343,085 were under budgeted expenditures of \$22,374,999 by \$2,031,914.

#### Additional Analysis

Applying the annual inmate average daily population (ADP) rate to expenditures, an average per annum was derived for fiscal year 2017 and 2018 for comparison. With an ADP of 645 inmates per day in FY17, the per annum cost per inmate was approximately \$33,753. In FY18, the ADP was 605 and the per annum cost decreased to approximately \$33,625.

There was an increase in FY18 in the number of Out of Compliance inmates occupying beds in the Authority. Out of Compliance inmates, those state responsible inmates remaining in local custody 90 or more days after sentencing, increased from an average of 107 individuals in FY17 to 110 in FY18.

As occurred in FY17, fluctuations in the jurisdiction's use of the Authority over the previous three (3) years created changes in the distribution of locality shares. Frederick County's share of the cost of operations decreased from 43.13% in FY17 to 41.10% in FY18. Clarke County's share increased from 3.98% to 4.20%, Fauquier County's share increased from 16.84% to 17.29%, and Winchester's share increased from 36.05% to 37.41%.

The Frederick County Government (fiscal agent) application and method of determining capital assets changed in 2003 to include only those capital equipment expenses exceeding \$5,000. Capital assets, net of accumulated depreciation, decreased from FY17 to FY18 due to current year depreciation. See Note 5 for details.

FY2018 assets \$24,985,742 FY2017 assets \$25,945,008

The long-term liabilities indicated in the audit are bonds payable and reserves held for payment of accrued compensated absences, net OPEB liability, and net pension liability less deferred charge on refunding. These liabilities decreased from FY17 to FY18, due to the decrease in the net pension liability and repayment of long-term debt. See Note 6 for details.

FY2018 accrual \$24,382,237 FY2017 accrual \$27,149,115

Additional information contained in this report applies to funds held for inmates and canteen operations. Northwestern Regional Jail Authority is the fiduciary custodian of all funds received from inmates or on behalf of inmates. Such funds are deposited and controlled on behalf of the inmate. Accountability methods adhere to generally accepted accounting practices and are subject to annual audit. Practical internal controls are established in the form of clearly detailed policies and procedures that provide a system of checks and balances to protect fiduciary funds from theft or fraud.



# Statement of Net Position At June 30, 2018 (With Comparative Totals for 2017)

	_	2018		2017
ASSETS	_			
Current assets: Cash and cash equivalents Accounts receivable Due from other governments	\$	9,754,520 127,187 791,799	\$	8,654,148 167,853 811,064
Total current assets	\$_	10,673,506	\$_	9,633,065
Noncurrent assets:  Land and construction in progress  Other capital assets, net of accumulated depreciation	\$	2,538,457 22,447,285		2,436,337 23,508,671
Net capital assets	\$_	24,985,742		25,945,008
Total assets	\$_	35,659,248	\$_	35,578,073
DEFERRED OUTFLOWS OF RESOURCES  Deferred charge on refunding  OPEB deferrals  Pension deferrals	<b>\$</b>	690,446 117,297 2,002,069	\$	736,476 - 3,132,543
Total deferred outflows of resources	\$_	2,809,812	\$_	3,869,019
Total assets and deferred outflows of resources	\$_	38,469,060	\$	39,447,092
LIABILITIES	_			
Current liabilities: Accounts payable Compensated absences, current portion Bonds payable, current portion Bond premium, current portion	\$	454,213 282,546 1,012,500 100,319	\$	606,930 273,413 982,500 108,566
Total current liabilities	\$_	1,849,578	\$_	1,971,409
Noncurrent liabilities: Compensated absences, less current portion Bonds payable, less current portion Bond premium, less current portion Net OPEB liability Net pension liability	\$	1,130,183 15,170,000 471,636 1,109,103 5,105,950	\$	1,093,651 16,182,500 571,955 - 7,936,530
Total noncurrent liabilities	\$_	22,986,872	\$_	25,784,636
Total liabilities	\$_	24,836,450	\$_	27,756,045
DEFERRED INFLOWS OF RESOURCES	_			
Pension deferrals OPEB deferrals	\$	1,447,575 123,272	\$	161,692 -
Total deferred inflows of resources	\$_	1,570,847	\$_	161,692
NET POSITION	_			
Net investment in capital assets Unrestricted	\$	9,554,447 2,507,316	\$	9,570,797 1,958,558
Total net position	\$	12,061,763	\$	11,529,355
Total liabilities, deferred inflows of resources, and net position	\$_	38,469,060	\$	39,447,092

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

# Statement of Revenues, Expenses and Changes in Net Position Year Ended June 30, 2018

(With Comparative Totals for 2017)

	_	2018		2017
Operating revenues:				_
Care of prisoners:				
Local and other per diems	\$	13,200,126	\$	12,378,407
Commonwealth of Virginia jail costs		1,246,476		1,390,952
Federal		885		1,752
Work release		339,992		349,422
Other	_	645,494		657,364
Total operating revenues	\$_	15,432,973	\$_	14,777,897
Operating expenses:				
Personnel	\$	10,242,047	\$	9,844,880
Fringes		4,184,848		4,255,175
Contractual		1,042,099		1,349,979
Other charges		2,733,228		2,652,069
Depreciation	_	1,114,053	_	1,165,288
Total operating expenses	\$_	19,316,275	\$_	19,267,391
Net operating income (loss)	\$_	(3,883,302)	\$_	(4,489,494)
Nonoperating revenues (expenses):				
Commonwealth of Virginia State Compensation Board	\$	5,450,677	\$	5,469,107
Other State grants		531,008		523,869
Interest income		121,585		60,749
Interest expense		(543,420)		(576,143)
Bond issuance costs	_	-	_	(15,000)
Net nonoperating revenues (expenses)	\$_	5,559,850	\$_	5,462,582
Change in net position	\$	1,676,548	\$	973,088
Net position, beginning of year, as restated	_	10,385,215		10,556,267
Net position, end of year	\$_	12,061,763	\$_	11,529,355

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

# Statement of Cash Flows Year Ended June 30, 2018 (With Comparative Totals for 2017)

(With comparative rotals for 2)	-	2018	2017
Cash flows from operating activities: Receipts from customers Payments to suppliers Payments to and for employees	\$	15,492,904 \$ (3,928,044) (14,824,515)	14,736,532 (3,935,226) (14,210,143)
Net cash flows provided by (used for) operating activities	\$_	(3,259,655) \$	(3,408,837)
Cash flows from noncapital and related financing activities: Government grants	\$_	5,981,685 \$	5,992,976
Cash flows from capital and related financing activities: Purchase of capital assets Principal payments on debt Bond Issuance costs Interest paid on debt	\$	(154,787) \$ (982,500) - (605,956)	(2,031,279) (890,000) (15,000) (639,042)
Net cash flows provided by (used for) capital and related financing activities	\$_	(1,743,243) \$	(3,575,321)
Cash flows from investing activities: Interest income	\$_	121,585 \$	60,749
Net increase (decrease) in cash and cash equivalents	\$	1,100,372 \$	(930,433)
Cash and cash equivalents, beginning of year	_	8,654,148	9,584,581
Cash and cash equivalents, end of year	\$	9,754,520 \$	8,654,148
Reconciliation of net operating income (loss) to net cash provided by (used for) operating activities:  Net operating income (loss)  Adjustments to reconcile net operating income (loss)  to cash used in operating activities:	\$	(3,883,302) \$	(4,489,494)
Depreciation  Changes in assets, deferred outflows of resources,  liabilities, and deferred inflows of resources:		1,114,053	1,165,288
Accounts receivable and due from other governments Pension deferrals - deferred outflows OPEB deferrals - deferred outflows Accounts payable Compensated absences Net pension liability Net OPEB liability OPEB deferrals - deferred inflows Pension deferrals - deferred inflows		59,931 1,130,474 (47,697) (152,717) 45,665 (2,830,580) (104,637) 123,272	(41,365) (1,601,910) - 66,822 (43,542) 2,485,073 - -
Net cash flows provided by (used for) operating activities	<b>-</b> \$	1,285,883 (3,259,655) \$	(949,709)
Hot dash hows provided by (asea for) operating activities	Ψ=	(0,207,000) ψ	(0, 100,001)

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

#### Notes to Financial Statements At June 30, 2018

#### NOTE 1 - FINANCIAL REPORTING ENTITY:

Northwestern Regional Jail Authority ("the Authority") was organized on May 26, 2005 pursuant to provisions of Chapter 3 of Title 53.1 of the <u>Code of Virginia</u> (1950), as amended. The Authority serves as a regional jail for the Counties of Clarke, Fauquier, and Frederick and the City of Winchester. The Authority is considered a jointly governed organization of the participant localities. The Authority is the successor organization to the former Clarke, Fauquier, Frederick, Winchester Regional Adult Detention Center.

#### NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

#### Financial Statement Presentation:

The accompanying financial statements are prepared in accordance with pronouncements issued by the Governmental Accounting Standards Board (GASB). The principles prescribed by GASB represent generally accepted accounting principles applicable to governmental units.

#### 1. Basis of Accounting:

The Authority utilizes the enterprise fund method of accounting for financial reporting purposes. Enterprise fund accounting uses the accrual basis of accounting where revenues are recorded when earned and expenses are recorded when incurred, regardless of when the cash flows occur.

Operating revenues and expenses are defined as those items that result from providing services and include all transactions and events which are not capital and related financing, noncapital financing or investing activities. Nonoperating revenues are defined as grants, investment and other income. Nonoperating expenses are defined as capital and noncapital related financing and other expenses.

#### 2. Cash and Cash Equivalents:

Cash and cash equivalents are reported at cost, which approximates market value. Cash and cash equivalents include cash on hand, checking and savings accounts, and short-term, highly liquid investments (including repurchase agreements) with maturities of three months or less from the date of acquisition. The Authority maintains cash accounts with financial institutions in accordance with the Virginia Security for Public Deposits Act of the <u>Code of Virginia</u>. The Act requires financial institutions to meet specific collateralization requirements.

#### 3. Investments:

External investment pools are measured at amortized cost in accordance with GASB 79. All other investments are reported at fair value.

#### 4. Capital Assets:

Capital assets are recorded at cost. Donated capital assets are recorded at their acquisition value at the date of gift. The Authority's capitalization threshold is \$5,000.

Major outlays for capital assets and improvements are capitalized as projects are constructed. Costs of construction include legal, bond and loan closing costs, plus interest costs less interest earned on construction funds during the period of construction. There was no interest capitalized during the year.

Notes to Financial Statements At June 30, 2018 (Continued)

#### NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (CONTINUED)

#### 4. Capital Assets: (Continued)

Depreciation is provided using the straight-line method over the estimated useful lives of each asset class as follows:

Building and improvements 40 to 50 years Equipment 5 to 10 years Vehicles 5 to 7 years

Maintenance, repairs, and minor equipment are charged to operations when incurred. Expenses that materially change capacities or extend useful lives are capitalized. Upon sale or retirement of land, buildings, and equipment, the cost and related accumulated depreciation, if applicable, are eliminated from the respective accounts and any resulting gain or loss is included in the results of operations.

#### 5. Compensated Absences:

The Authority's employees earn annual leave (vacation pay) in varying amounts and can accumulate annual leave based on length of service. All employees earn the same sick pay regardless of the length of service. Maximum annual leave accumulation hours are the hours allowable at the time of separation or at the end of any calendar year.

Employees terminating their employment are paid, by the Authority, their accumulated annual leave up to the maximum limit. Unused sick leave is paid at the date of separation, but is limited to 25% of amounts unused upon termination up to \$2,500.

The liabilities for annual and sick leave have been recorded in accordance with the provisions of GASB No. 16, *Accounting for Compensated Absences*. Accordingly, the amount of leave recognized as expense is the amount earned during the year.

#### 6. Revenue Recognition:

Revenues for charges for services to participant localities are based on prisoner days for each locality and are recorded when due. Year-end settlements are made with each participant locality. Amounts due are reported as receivables and amounts overpaid are reported as deferred revenues.

The Commonwealth of Virginia provides funding for operations and also provides funding for state prisoners held on a per-diem basis.

#### 7. Use of Estimates:

The preparation of financial statements in conformity with U.S. 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.

#### 8. Allowance for Uncollectible Accounts:

The Authority calculates its allowance for specific accounts using historical collection data and, in certain cases, specific account analysis. Historical collection data indicates that any uncollectible amounts would be negligible. Management believes that any accounts that may be written off would not be significant. Accordingly, no allowance for uncollectible accounts has been established.

Notes to Financial Statements At June 30, 2018 (Continued)

#### NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (CONTINUED)

#### 9. Comparative Totals:

Comparative totals are presented for informational purposes only.

#### 10. 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 (expense/expenditure) until then. The Authority has multiple items that qualify for reporting in this category. One item is the deferred charge on refunding reported in the government-wide statement of net position. A deferred charge on refunding results from the difference in the carrying value of refunded debt and its reacquisition price. This amount is deferred and amortized over the shorter of the life of the refunded or refunding debt. The other item is comprised of certain items related to the measurement of the net pension liability and net OPEB liability and contributions to the pension and OPEB plans made during the current year and subsequent to the net pension liability and net OPEB liability measurement date. For more detailed information on these items, reference the related notes.

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 (revenue) until that time. The Authority has one type of item that qualifies for reporting in this category. Certain items related to the measurement of the net pension liability and net OPEB liability are reported as deferred inflows of resources. For more detailed information on these items, reference the related notes.

#### 11. Net Position:

Net Position is the difference between a) assets and deferred outflows of resources and b) liabilities and deferred inflows of resources. Net investment in capital assets represents capital assets, less accumulated depreciation, less any outstanding debt related to the acquisition, construction or improvement of those assets. Deferred outflows of resources and deferred inflows of resources that are attributable to the acquisition, construction, or improvement of those assets or related debt are also included in this component of net position.

#### 12. Net Position Flow Assumption:

Sometimes the Authority will fund outlays for a particular purpose from both restricted (e.g., restricted bond or grant proceeds) and unrestricted resources. In order to calculate the amounts to report as restricted - net position and unrestricted - net position in the government-wide and proprietary fund financial statements, a flow assumption must be made about the order in which the resources are considered to be applied. It is the Authority's policy to consider restricted - net position to have been depleted before unrestricted - net position is applied.

Notes to Financial Statements At June 30, 2018 (Continued)

#### NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (CONTINUED)

#### 13. Pensions:

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Authority's Retirement Plan and the additions to/deductions from the Authority's Retirement Plan's net fiduciary position have been determined on the same basis as they were reported by the 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.

#### 14. Other Postemployment Benefits (OPEB)

#### Group Life Insurance

The Virginia Retirement System (VRS) Group Life Insurance (GLI) Program provides coverage to state employees, teachers, and employees of participating political subdivisions. The GLI Program was established pursuant to §51.1-500 et seq. of the <u>Code of Virginia</u>, as amended, and which provides the authority under which benefit terms are established or may be amended. The GLI 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 GLI Program OPEB liability, deferred outflows of resources and deferred inflows of resources related to the GLI OPEB, and GLI OPEB expense, information about the fiduciary net position of the VRS GLI Program OPEB and the additions to/deductions from the VRS GLI 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.

#### NOTE 3 - DEPOSITS AND INVESTMENTS:

Frederick County acts as a fiscal agent and provides accounting for the general operating accounts of the Authority. The Authority's operating cash is included in the pooled cash and investments of Frederick County. The Authority is reported in the Frederick County Financial Report as an agency fund. In addition, the Authority maintains separate bank accounts for Canteen and Inmate funds. In previous years, the Authority issued long-term debt and received funds for a jail expansion project. The remaining funds are in the custody of the City of Winchester which is the fiscal agent for the jail expansion project.

#### Deposits:

At year-end, the carrying value of the Authority's deposits with banks and savings institutions as part of the Frederick County pooled cash and investments was \$7,836,287. The bank balances are not separately determinable. Deposits held by the City of Winchester in a State Non-Arbitrage Program (SNAP) account were \$1,260,318, and deposits in the Authority's SNAP account were \$657,916.

At June 30, 2018, all of the Authority's bank balances were covered by federal depository insurance or collateralized in accordance with the Virginia Security for Public Deposits Act. The State Treasury Board is responsible for monitoring compliance with the collateralization and reporting requirements of the Act and for notifying local governments of compliance by banks and savings and loans. Of the pooled bank balances, no funds were uninsured and uncollateralized in banks or savings and loans not qualifying under the Act at June 30, 2018.

Notes to Financial Statements At June 30, 2018 (Continued)

#### NOTE 3 - DEPOSITS AND INVESTMENTS: (CONTINUED)

#### Investments:

As described above, the Authority's cash is included in the Frederick County pooled cash and Frederick County utilizes the Local Government Investment Pool, which consists of highly liquid unclassified investments. The amount of the Authority's equity in the pooled investment funds is not separately determinable.

#### Credit Risks:

Credit risk is the risk that a borrower will not be able to make payments and default on debt. The Authority's policy is to follow the statutes of the Commonwealth of Virginia and invest in obligations of the United States or agencies thereof, obligations of the Commonwealth of Virginia or political subdivisions thereof, obligations of the International Bank for Reconstruction and Development (World Bank) and Asian Development Bank, commercial paper rated A-1 by Standard and Poor's Corporation or P-1 by Moody's Commercial Paper Record, banker's acceptances, repurchase agreements and the State Treasurer's Local Government Investment Pool and the Commonwealth of Virginia State Non-Arbitrage Program. Interest rate risk is the risk that the value of investments will decrease as a result of a rise in interest rates. The Authority currently has no formal policy relating to interest rate risk.

The Authority's only cash equivalent or investment as of June 30, 2018 is \$657,916 held in a SNAP account. This does not include the \$1,260,318 which, as previously mentioned, is held on the Authority's behalf in a SNAP account by the City of Winchester. SNAP accounts have a quality rating of AAAm and investment maturities of less than twelve months.

#### **External Investment Pool:**

The value of the position in the external investment pool is the same as the value of the pool shares. SNAP is an amortized cost basis portfolio under the provisions of GASB 79. There are no withdrawal limitations or restrictions imposed on participants.

#### NOTE 4 - ACCOUNTS RECEIVABLE AND DUE FROM OTHER GOVERNMENTS:

	Accounts	Due from Other		
	Receivable	 Governments		
Commonwealth of Virginia	\$ -	\$ 791,402		
Federal government	-	397		
Other	127,187	 -		
Total	\$ 127,187	\$ 791,799		

Notes to Financial Statements At June 30, 2018 (Continued)

# NOTE 5 - CAPITAL ASSETS:

A summary of changes in capital assets is as follows:

	_	Beginning Balances		Increases	 Decreases		Ending Balances
Capital assets not being depreciated:							
Land	\$	600,375	\$	-	\$ -	\$	600,375
Construction in progress	_	1,835,962		102,120	 -		1,938,082
Total capital assets not being depreciated	\$_	2,436,337	\$_	102,120	\$ -	\$_	2,538,457
Capital assets being depreciated:							
Building and improvements	\$	39,954,773	\$	-	\$ -	\$	39,954,773
Equipment and vehicles	_	1,976,197		52,667	 -	_	2,028,864
Total capital assets being depreciated	\$_	41,930,970	\$	52,667	\$ -	\$_	41,983,637
Less: Accumulated depreciation:							
Building and improvements	\$	17,277,449	\$	1,046,314	\$ -	\$	18,323,763
Equipment and vehicles	_	1,144,850	_	67,739	 -	_	1,212,589
Total accumulated depreciation	\$_	18,422,299	\$	1,114,053	\$ -	\$_	19,536,352
Net capital assets being depreciated	\$_	23,508,671	\$	(1,061,386)	\$ -	\$_	22,447,285
Net capital assets	\$_	25,945,008	\$	(959,266)	\$ -	\$	24,985,742

# NOTE 6 - LONG-TERM DEBT:

The following is a summary of long-term debt activity for the year.

		Balance					Balance
		June 30, 2017	_	Increases	Decreases		June 30, 2018
	•			_			
Revenue Bonds	\$	14,725,000	\$	- \$	745,000	\$	13,980,000
VRA Bonds		2,440,000		-	237,500		2,202,500
Bond Premium		680,521			108,566	_	571,955
Total	\$	17,845,521	\$	- \$	1,091,066	\$	16,754,455

# NOTE 6 - LONG-TERM DEBT: (CONTINUED)

The amounts required to amortize long-term debt are as follows:

	_	Reven	Revenue Bonds			VRA	Bo	nds
Fiscal Year		Principal		Interest		Principal		Interest
2019	\$	765,000	\$	463,075	\$	247,500	\$	109,709
2020		790,000		440,125		262,500		97,772
2021		820,000		408,525		276,250		84,494
2022		850,000		383,925		292,500		70,258
2023		865,000		362,675		311,250		55,189
2024-2028		4,810,000		1,346,250		812,500		66,044
2029-2033	_	5,080,000		543,275	. ,	-		
Total	\$	13,980,000	\$	3,947,850	\$	2,202,500	\$	483,466

Details of long-term debt are as follows:

			Amount Due Within
	_	Total	One Year
\$495,000, Virginia Resources Authority Infrastructure and State Moral Obligation Revenue bonds series 2011A, issued May 18, 2011, maturing in various annual installments through October 1, 2025, interest paid semiannually at rates from 2.125% to 5.125%.	\$	350,000 \$	30,000
\$16,400,000, Revenue and Refunding bonds series 2013, issued April 9, 2013, maturing in various annual installments through July 1, 2033, interest paid semiannually at rates from 2.00% to 4.00%.		13,980,000	765,000
\$2,210,000, Virginia Resources Authority Infrastructure and State Moral Obligation Revenue bonds series 2016A, issued May 25, 2016, maturing in various annual installments through October 1, 2025, interest paid semiannually at rates from 4.506% to 5.125%.		1,852,500	217,500
semialitidarry at rates from 4.300% to 3.125%.		1,032,300	217,300
Total long-term debt	\$	16,182,500 \$	1,012,500
Add: Bond premiums		571,955	100,319
Net long-term debt	\$	16,754,455 \$	1,112,819

#### NOTE 7 - COMPENSATED ABSENCES:

In accordance with GASB accounting principles, the Authority has accrued the liability arising from all compensated absences. The amount of accrued vacation, compensatory time and sick pay totaled \$1,412,729 at June 30, 2018. This is an increase of \$45,665 from the prior year.

Notes to Financial Statements At June 30, 2018 (Continued)

#### NOTE 8 - PENSION PLAN:

#### Plan Description

All full-time, salaried permanent employees of the Authority are automatically covered by a VRS Retirement Plan upon employment, through the County of Frederick, Virginia. This is an agent multiple-employer plan administered by the Virginia Retirement System (the System) along with plans for other employer groups in the Commonwealth of Virginia. However, several entities participate in the VRS plan through the County of Frederick, Virginia and the participating entities report their proportionate information on the basis of a cost-sharing plan. 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 <u>Code of Virginia</u>, 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:

RETIREMENT PLAN PROVISIONS										
PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN								
About Plan 1 Plan 1 is a defined benefit plan. The retirement benefit is based on a member's age, creditable service and average final compensation at retirement using a formula.	About Plan 2 Plan 2 is a defined benefit plan. The retirement benefit is based on a member's age, 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.  • 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.								

RETIREMENT PLAN PROVISIONS (CONTINUED)		
PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
About Plan 1 (Cont.)	About Plan 2 (Cont.)	About the Hybrid Retirement Plan (Cont.)  • In addition to the monthly benefit payment payable from the defined benefit plan at retirement, a member may start receiving distributions from the balance in the defined contribution account, reflecting the contributions, investment gains or losses, and any required fees.
Eligible Members Employees are in Plan 1 if their membership date is before July 1, 2010, and they were vested as of January 1, 2013, and they have not taken a refund.  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.	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.	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-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.

RETIREMENT PLAN PROVISIONS (CONTINUED)		
PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
Hybrid Opt-In Election (Cont.) Members who were eligible for an optional retirement plan (ORP) and had prior service under Plan 1 were not eligible to elect the Hybrid Retirement Plan and remain as Plan 1 or ORP.	Hybrid Opt-In Election (Cont.) 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.	*Non-Eligible Members (Cont.) Those employees eligible for an optional retirement plan (ORP) must elect the ORP plan or the Hybrid Retirement Plan. If these members have prior service under Plan 1 or Plan 2, they are not eligible to elect the Hybrid Retirement Plan and must select Plan 1 or Plan 2 (as applicable) or ORP.
Retirement Contributions Employees contribute 5% of their compensation each month to their member contribution account through a pre-tax salary reduction. Member contributions are tax-deferred until they are withdrawn as part of a retirement benefit or as a refund. The employer makes a separate actuarially determined contribution to VRS for all covered employees. VRS invests both member and employer contributions to provide funding for the future benefit payment.	Retirement Contributions Employees contribute 5% of their compensation each month to their member contribution account through a pre-tax salary reduction.	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.

RETIREMENT PLAN PROVISIONS (CONTINUED)		
PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
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.	Creditable Service Same as Plan 1.	Creditable Service  Defined Benefit Component:  Under the defined benefit component of the plan, creditable service includes active service. Members earn creditable service for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional creditable service the member was granted. A member's total creditable service is one of the factors used to determine their eligibility for retirement and to calculate their retirement benefit. It also may count toward eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit.  Defined Contribution Component: Under the defined contribution component, creditable service is used to determine vesting for the employer contribution portion of the plan.

RETIREMENT PLAN PROVISIONS (CONTINUED)		
PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
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.	Vesting Same as Plan 1.	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 Contribution  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.

RETIREMENT PLAN PROVISIONS (CONTINUED)		
PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
Vesting (Cont.)	Vesting (Cont.)	Vesting (Cont.)  Defined Contributions Component: (Cont.) Upon retirement or leaving covered employment, a member is eligible to withdraw a percentage of employer contributions to the defined contribution component of the plan, based on service.  • After two years, a member is 50% vested and may withdraw 50% of employer contributions.  • After three years, a member is 75% vested and may withdraw 75% of employer contributions.  • After four or more years, a member is 100% vested and may withdraw 100% of employer contributions.  Distribution is not required by law until age 70½.
Calculating the Benefit The Basic Benefit is 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.	Calculating the Benefit See definition under Plan 1.	Calculating the Benefit  Defined Benefit Component:  See definition under Plan 1.

RETIREMENT PLAN PROVISIONS (CONTINUED)		
PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
Calculating the Benefit (Cont.) 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.	Calculating the Benefit (Cont.)	Calculating the Benefit (Cont.)  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 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%.  Sheriffs and regional jail superintendents: The retirement multiplier for sheriffs and regional jail superintendents is 1.85%.  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.	Service Retirement Multiplier VRS: Same as Plan 1 for service earned, purchased or granted prior to January 1, 2013. For non-hazardous duty members the retirement multiplier is 1.65% for creditable service earned, purchased or granted on or after January 1, 2013.  Sheriffs and regional jail superintendents: Same as Plan 1.  Political subdivision hazardous duty employees: Same as Plan 1.	Service Retirement Multiplier  Defined Benefit Component:  VRS: The retirement multiplier for the defined benefit component is 1.00%.  For members who opted into the Hybrid Retirement Plan from Plan 1 or Plan 2, the applicable multipliers for those plans will be used to calculate the retirement benefit for service credited in those plans.  Sheriffs and regional jail superintendents: Not applicable.  Political subdivision hazardous duty employees: Not applicable.  Defined Contribution Component: Not applicable.

RETI	RETIREMENT PLAN PROVISIONS (CONTINUED)		
PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN	
Normal Retirement Age VRS: Age 65. Political subdivisions hazardous duty employees: Age 60.	Normal Retirement Age VRS: Normal Social Security retirement age.  Political subdivisions hazardous duty employees: Same as Plan 1.	Normal Retirement Age Defined Benefit Component: VRS: Same as Plan 2.  Political subdivisions hazardous duty employees: Not applicable.  Defined Contribution Component: Members are eligible to receive distributions upon leaving employment, subject to restrictions.	
Earliest Unreduced Retirement Eligibility VRS: Age 65 with at least five years (60 months) of creditable service or at age 50 with at least 30 years of creditable service.  Political subdivisions hazardous duty employees: Age 60 with at least five years of creditable service or age 50 with at least 25 years of creditable service.	Earliest Unreduced Retirement Eligibility VRS: Normal Social Security retirement age with at least five years (60 months) of creditable service or when their age and service equal 90.  Political subdivisions hazardous duty employees: Same as Plan 1.	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: Not applicable.  Defined Contribution Component: Members are eligible to receive distributions upon leaving employment, subject to restrictions.	
Earliest Reduced Retirement Eligibility VRS: Age 55 with at least five years (60 months) of 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.	

RETIREMENT PLAN PROVISIONS (CONTINUED)		
PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
Earliest Reduced Retirement Eligibility (Cont.)	Earliest Reduced Retirement Eligibility (Cont.)	Earliest Reduced Retirement Eligibility (Cont.)
Political subdivisions hazardous duty employees: 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 to 4%) up to a maximum COLA of 5%.  Eligibility: For members who retire with an unreduced benefit or with a reduced benefit with at least 20 years of creditable service, the COLA will go into effect on July 1 after one full calendar year from the retirement date.  For members who retire with a reduced benefit and who have less than 20 years of creditable service, the COLA will go into effect on July 1 after one calendar year following the unreduced retirement eligibility date.	Cost-of-Living Adjustment (COLA) in Retirement The Cost-of-Living Adjustment (COLA) matches the first 2% increase in the CPI-U and half of any additional increase (up to 2%), for a maximum COLA of 3%.  Eligibility: Same as Plan 1.	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 Plan 2.

RETIREMENT PLAN PROVISIONS (CONTINUED)		
PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
Cost-of-Living Adjustment (COLA) in Retirement (Cont.)	Cost-of-Living Adjustment (COLA) in Retirement (Cont.)	Cost-of-Living Adjustment (COLA) in Retirement (Cont.)
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 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.	Exceptions to COLA Effective Dates: Same as Plan 1.	Exceptions to COLA Effective Dates: Same as Plan 1 and Plan 2.

Notes to Financial Statements At June 30, 2018 (Continued)

#### NOTE 8 - PENSION PLAN: (CONTINUED)

Plan Description (Continued)

RETIREMENT PLAN PROVISIONS (CONTINUED)		
PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
Disability Coverage Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.7% on all service, regardless of when it was earned, purchased or granted.	Disability Coverage Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.65% on all service, regardless of when it was earned, purchased or granted.	Disability Coverage Employees of political subdivisions (including Plan 1 and Plan 2 opt-ins) participate in the Virginia Local Disability Program (VLDP) unless their local governing body provides an employer-paid comparable program for its members.  Hybrid members (including Plan 1 and Plan 2 opt-ins) covered under VLDP are subject to a one-year waiting period before becoming eligible for non-work-related disability benefits.
Purchase of Prior Service Members may be eligible to purchase service from previous public employment, active duty military service, an eligible period of leave or VRS refunded service as 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.	Purchase of Prior Service Same as Plan 1.	Purchase of Prior Service  Defined Benefit Component: Same as Plan 1, with the following exceptions:  •Hybrid Retirement Plan members are ineligible for ported service.  Defined Contribution Component: Not applicable.

#### Pension Plan Data

Information about the VRS Political Subdivision Retirement Plan is also available in the separately issued VRS 2017 Comprehensive Annual Financial Report (CAFR). A copy of the 2017 VRS CAFR may be downloaded from the VRS website at <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.

Notes to Financial Statements At June 30, 2018 (Continued)

#### NOTE 8 - PENSION PLAN: (CONTINUED)

#### **Contributions**

The contribution requirement for active employees is governed by §51.1-145 of the <u>Code of Virginia</u>, 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% 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 Authority's contractually required employer contribution rate for the year ended June 30, 2018 was 10.74% 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 Authority were \$1,469,413 and \$1,422,730 for the years ended June 30, 2018 and June 30, 2017, respectively.

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

At June 30, 2018, the Authority reported a liability of \$5,105,950 for its proportionate share of the net pension liability. The Authority'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. The Authority's proportionate share of the same was calculated using creditable compensation as of June 30, 2017 and 2016 as a basis for allocation. At June 30, 2017 and 2016, the Authority's proportion was 34.627% and 33.99%, respectively.

#### Actuarial Assumptions - General Employees

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

Inflation 2.5%

Salary increases, including inflation 3.5% - 5.35%

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

expenses, including inflation\*

<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.

Notes to Financial Statements At June 30, 2018 (Continued)

# NOTE 8 - PENSION PLAN: (CONTINUED)

Actuarial Assumptions - General Employees (Continued)

#### Mortality rates:

Largest 10 - Non-Hazardous Duty: 20% of deaths are assumed to be service related Pre-Retirement:

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

#### Post-Retirement:

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

#### Post-Disablement:

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

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

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

#### Post-Retirement:

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

#### Post-Disablement:

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

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

#### Largest 10 - Non-Hazardous Duty:

Mortality Rates (pre-retirement, post-	Updated to a more current mortality table - RP-2014
retirement healthy, and disabled)	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	Increased rate from 14% to 20%

# NOTE 8 - PENSION PLAN: (CONTINUED)

# Actuarial Assumptions - General Employees (Continued)

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

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Mortality Rates (pre-retirement, post-	Updated to a more current mortality table - RP-2014
retirement healthy, and disabled)	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	Increased rate from 14% to 15%

### Actuarial Assumptions - Public Safety Employees with Hazardous Duty Benefits

The total pension liability for Public Safety employees with Hazardous Duty Benefits in the County of Frederick, Virginia's Retirement Plan was based on an actuarial valuation as of June 30, 2016, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2017.

Inflation 2.5%

Salary increases, including inflation 3.5% - 4.75%

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

expenses, including inflation\*

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

#### Mortality rates:

Largest 10 - Hazardous Duty: 70% 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 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, 1.0% increase compounded from ages 70 to 90; females set forward 3 years.

#### Post-Disablement:

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

Notes to Financial Statements At June 30, 2018 (Continued)

# NOTE 8 - PENSION PLAN: (CONTINUED)

Actuarial Assumptions - Public Safety Employees with Hazardous Duty Benefits (Continued)

Mortality rates: (Continued)

All Others (Non 10 Largest) - Hazardous Duty: 45% 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 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, 1.0% increase compounded from ages 70 to 90; females set forward 3 years.

#### Post-Disablement:

RP-2014 Disability Mortality Rates 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:

#### Largest 10 - Hazardous Duty:

<u> </u>	
Mortality Rates (pre-retirement, post-	Updated to a more current mortality table - RP-2014
retirement healthy, and disabled)	projected to 2020
Retirement Rates	Lowered rates at older ages
Withdrawal Rates	Adjusted rates to better fit experience
Disability Rates	Increased rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 60% to 70%

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

Mortality Rates (pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table - RP-2014 projected to 2020
Retirement Rates	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 fit experience
Salary Scale	No change
Line of Duty Disability	Decreased rate from 60% to 45%

# NOTE 8 - 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%
*Ex	xpected arithme	tic nominal return	7.30%

<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 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 County 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.

# NOTE 8 - PENSION PLAN: (CONTINUED)

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

The following presents the Authority's proportionate share of the net pension liability using the discount rate of 7.00%, as well as what the Authority's net pension liability (asset) 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:

			Rate		
	_	(6.00%)	(7.00%)	_	(8.00%)
Net Pension Liability (Asset)	\$	12,597,485 \$	5,105,950	\$	(1,052,432)

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

For the year ended June 30, 2018, the Authority recognized pension expense of \$1,060,508. Since there was a change in proportionate share between measurement dates, a portion of pension expense was related to deferred amounts from changes in proportion and from differences between employer contributions and the proportionate share of employer contributions. At June 30, 2018, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 479,720	\$ 376,145
Change in assumptions	-	352,709
Changes in proportion and differences between employer contributions and proportionate share of contributions	52,936	-
Net difference between projected and actual earnings on pension plan investments	-	718,721
Employer contributions subsequent to the measurement date	1,469,413	 <u>-</u>
Total	\$ 2,002,069	\$ 1,447,575

\$1,469,413 reported as deferred outflows of resources related to pensions resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction 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 in future reporting periods as follows:

Year ended June 30	
2019	\$ (462,019)
2020	119,679
2021	(56,385)
2022	(516,195)

# NOTE 9 - GROUP LIFE INSURANCE (GLI) PROGRAM (OPEB PLAN):

# 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 is a cost-sharing multiple-employer plan administered by the Virginia Retirement System (the System), along with pensions and other OPEB 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**

# **Eligible Employees**

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

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

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

#### **Benefit Amounts**

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

- <u>Natural Death Benefit</u> 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:
  - o Accidental dismemberment benefit
  - Safety belt benefit
  - o Repatriation benefit
  - o Felonious assault benefit
  - Accelerated death benefit option

#### NOTE 9 - GROUP LIFE INSURANCE (GLI) PROGRAM (OPEB PLAN): (CONTINUED)

Plan Description (Continued)

# GROUP LIFE INSURANCE PROGRAM PLAN PROVISIONS (CONTINUED)

#### **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. The 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. Contributions to the Group Life Insurance Program from the entity were \$72,628 and \$69,387 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 entity reported a liability of \$1,109,103 for its proportionate share of the Net GLI OPEB Liability. The Net GLI OPEB Liability was measured as of June 30, 2017 and the total GLI OPEB liability used to calculate the Net GLI OPEB Liability was determined by an actuarial valuation as of that date. The covered employer's proportion of the Net GLI OPEB Liability was based on the covered employer's actuarially determined employer contributions to the Group Life Insurance Program for the year ended June 30, 2017 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2017, the participating employer's proportion was 0.0737% as compared to 0.0694% at June 30, 2016.

For the year ended June 30, 2018, the participating employer recognized GLI OPEB expense of \$20,776. 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.

# NOTE 9 - GROUP LIFE INSURANCE (GLI) PROGRAM (OPEB PLAN): (CONTINUED)

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

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 Outflows of Resources	 Deferred Inflows of Resources
Differences between expected and actual experience	\$	-	\$ 24,239
Net difference between projected and actual earnings on GLI OPEB program investments		-	41,898
Change in assumptions		-	57,135
Changes in proportion		44,669	-
Employer contributions subsequent to the measurement date	_	72,628	 
Total	\$_	117,297	\$ 123,272

\$72,628 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	\$ (16,967)
2020	(16,967)
2021	(16,967)
2022	(16,967)
2023	(6,579)
Thereafter	(4,156)

Notes to Financial Statements At June 30, 2018 (Continued)

# NOTE 9 - GROUP LIFE INSURANCE (GLI) PROGRAM (OPEB PLAN): (CONTINUED)

# 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%
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Salary increases, including inflation:

General state employees	3.5% - 5.35%
Teachers	3.5%-5.95%
SPORS employees	3.5%-4.75%
VaLORS employees	3.5%-4.75%
JRS employees	4.5%
Locality - General employees	3.5%-5.35%
Locality - Hazardous Duty employees	3.5%-4.75%

Investment rate of return 7.0%, net of investment expenses,

including inflation\*

# 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 Mortality Rates projected with scale BB to 2020; males 115% of rates; females 130% of rates.

<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 OPEB liabilities.

# NOTE 9 - GROUP LIFE INSURANCE (GLI) PROGRAM (OPEB PLAN): (CONTINUED)

Actuarial Assumptions (Continued)

Mortality Rates - General State Employees: (Continued)

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-	Updated to a more current mortality table - RP-2014	
retirement healthy, and disabled)	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	Adjusted rates to better match experience	
Salary Scale	No change	
Line of Duty Disability	Increased 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 Healthy 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.

Mortality Rates (pre-retirement, post-	Updated to a more current mortality table - RP-2014
retirement healthy, and disabled)	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	Adjusted rates to better match experience
Salary Scale	No change

Notes to Financial Statements At June 30, 2018 (Continued)

# NOTE 9 - GROUP LIFE INSURANCE (GLI) PROGRAM (OPEB PLAN): (CONTINUED)

# Actuarial Assumptions (Continued)

#### 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 Mortality Rates projected with scale BB to 2020; males set forward 2 years; unisex using 100% male.

Mortality Rates (pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table - RP-2014 projected to 2020 and reduced margin for future
and disabled,	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%

Notes to Financial Statements At June 30, 2018 (Continued)

# NOTE 9 - GROUP LIFE INSURANCE (GLI) PROGRAM (OPEB PLAN): (CONTINUED)

# Actuarial Assumptions (Continued)

#### 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 Mortality Rates projected with scale BB to 2020; males set forward 2 years; unisex using 100% male.

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

Notes to Financial Statements At June 30, 2018 (Continued)

# NOTE 9 - GROUP LIFE INSURANCE (GLI) PROGRAM (OPEB PLAN): (CONTINUED)

# Actuarial Assumptions (Continued)

#### Mortality Rates - JRS 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% 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.

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

Notes to Financial Statements At June 30, 2018 (Continued)

# NOTE 9 - GROUP LIFE INSURANCE (GLI) PROGRAM (OPEB PLAN): (CONTINUED)

# Actuarial Assumptions (Continued)

#### 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 Mortality Rates projected with scale BB to 2020; males set forward 2 years, 110% of rates; females 125% of rates.

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

Notes to Financial Statements At June 30, 2018 (Continued)

# NOTE 9 - GROUP LIFE INSURANCE (GLI) PROGRAM (OPEB PLAN): (CONTINUED)

# Actuarial Assumptions (Continued)

#### 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 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:

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

#### 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 Mortality Rates projected with scale BB to 2020; males set forward 2 years; unisex using 100% male.

Notes to Financial Statements At June 30, 2018 (Continued)

# NOTE 9 - GROUP LIFE INSURANCE (GLI) PROGRAM (OPEB PLAN): (CONTINUED)

# Actuarial Assumptions (Continued)

# Mortality Rates - Largest Ten Locality Employers - Hazardous Duty Employees: (Continued)

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

Mortality Rates (pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table - RP-2014 projected to 2020
Retirement Rates	Lowered retirement rates at older ages
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 Mortality Rates projected with scale BB to 2020; males set forward 2 years; unisex using 100% male.

Notes to Financial Statements At June 30, 2018 (Continued)

# NOTE 9 - GROUP LIFE INSURANCE (GLI) PROGRAM (OPEB PLAN): (CONTINUED)

Actuarial Assumptions (Continued)

Mortality Rates - Non-Largest Ten Locality Employers - Hazardous Duty Employees: (Continued)

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

Mortality Rates (pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table - RP-2014 projected to 2020
Retirement Rates	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	_	40.04%
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.

# NOTE 9 - GROUP LIFE INSURANCE (GLI) PROGRAM (OPEB PLAN): (CONTINUED)

# Long-Term Expected Rate of Return

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

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

<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.

# NOTE 9 - GROUP LIFE INSURANCE (GLI) PROGRAM (OPEB PLAN): (CONTINUED)

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:

	Rate			
	1% Decrease	Current Discount	1% Increase	
	(6.00%)	(7.00%)	(8.00%)	
Authority's proportionate share of the				
Group Life Insurance Program				
Net OPEB Liability	1,434,250	1,109,103	845,245	

#### 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.

#### NOTE 10 - COMMITMENTS AND CONTINGENCIES:

At June 30, 2018, there were no matters of litigation involving the Authority that have an adverse material effect on the financial position of the Authority.

#### NOTE 11 - INMATE AND OTHER ACCOUNTS:

The Authority maintains accounting for inmate and canteen (commissary) activity funds. The balance of the inmate funds was \$185,479.

The Canteen Fund activity is summarized below:

Cash balance, beginning of year	\$_	191,772
Receipts:	_	
Canteen sales	\$_	1,211,130
Total receipts	\$	1,211,130
Disbursements:		
Inmate programs	\$_	1,120,655
Total disbursements	\$	1,120,655
Cash balance, end of year	\$	282,247

# NOTE 12 - OPERATING RESERVE FUND:

As a requirement of the jail expansion bond issue, the Authority is required to fund an operating reserve. At June 30, 2018, this fund totaled \$2,509,115.

#### **NOTE 13 - PROBATION PROGRAM:**

The financial activity for the Probation Program is included in the Authority's financial statements. The revenues and expenditures for the Probation Program for Fiscal Year 2018 are summarized below:

_			
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1/6/	<i>/</i> CI	IUC	Z3.

Revenues:	
Supervision fees	\$ 36,539
Drug testing fees	320
Miscellaneous	241
Revenue from the Commonwealth	276,818
Total revenues	\$ 313,918
Expenditures:	
Personnel	\$ 201,972
Fringes	75,810
Contractual	1,795
Other charges	17,487
Total expenditures	\$ 297,064
Excess of revenues over expenditures	\$ 16,854

# NOTE 14 - ADOPTION OF ACCOUNTING PRINCIPLES:

The Authority implemented the financial reporting provisions of Governmental Accounting Standards Board Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions during the fiscal year ended June 30, 2018. This Statement establishes standards for measuring and recognizing liabilities, deferred outflows of resources, deferred inflows of resources, and expense/expenditures related to postemployment benefits other than pensions (other postemployment benefits or OPEB). Note disclosure and required supplementary information requirements about OPEB are also addressed. The requirements of this Statement will improve accounting and financial reporting by state and local governments for OPEB. In addition, the Authority implemented Governmental Accounting Standards Board Statement No. 85, Omnibus 2017 during the fiscal year ended June 30, 2018. This Statement addresses practice issues identified during implementation and application of certain GASB statements for a variety of topics including issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefits (pensions and other postemployment benefits (OPEB)). The implementation of these Statements resulted in the following restatement of net position:

Net position as orginally reported at June 30, 2017	\$ 11,529,355
Implementation of GASB 75	 (1,144,140)
Net position at June 30, 2017, as restated	\$ 10,385,215

- REQUIRED SUPPLEMENTARY INFORMATION -	

# Schedule of Authority's Proportionate Share of the Net Pension Liability Years Ended June 30, 2015 through June 30, 2018

Share of County of Frederick, Virginia's VRS Plan:

						Pension Plan's		
					Proportionate	Fiduciary Net		
	Proportion of				Share of the NPL	Position as a		
Measurement	the Net Pension	Pr	oportionate	Covered	as a Percentage of	Percentage of Total		
Date	Liability (NPL)	Share of the NPL		Liability (NPL) Share of the NPL		Payroll	Covered Payroll	Pension Liability
			_					
June 30, 2017	34.6270%	\$	5,105,950	\$ 13,594,320	37.5594%	90.2248%		
June 30, 2016	33.9888%		7,936,530	9,110,219	87.1168%	83.7640%		
June 30, 2015	34.7340%		5,451,457	8,872,450	61.4425%	88.1531%		
June 30, 2014	34.5661%		4,899,782	8,438,994	58.0612%	88.6166%		

This schedule is intended to show information for 10 years. However, information prior to the 2014 valuation is not available. Additional years will be included as they become available.

# Schedule of Employer Contributions - Pension Years Ended June 30, 2015 through June 30, 2018

					Contributions in					
					Relation to			Contributions		
			Contractually		Contractually	Contribution	Employer's	as a % of		
		Required Required		Required			Deficiency	Covered	Covered	
_	Year		Contribution		Contribution	 (Excess)	 Payroll	Payroll		
	2018	\$	1,469,413	\$	1,469,413	\$ -	\$ 14,285,071	10.2864%	)	
	2017		1,422,730		1,422,730	-	13,594,320	10.4656%	)	
	2016		1,512,778		1,512,778	-	9,110,219	16.6053%	)	
	2015		1,448,919		1,448,919	-	8,872,450	16.3305%	)	

This schedule is intended to show information for 10 years. However, information prior to 2015 is not available. Additional years will be included as they become available.

# Notes to Required Supplementary Information - Pension 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-	Updated to a more current mortality table - RP-2014
retirement healthy, and disabled)	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	Increased rate from 14% to 20%

#### Largest 10 - Hazardous Duty:

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

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

Mortality Rates (pre-retirement, post-	Updated to a more current mortality table - RP-2014
retirement healthy, and disabled)	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	Increased rate from 14% to 15%

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

Mortality Rates (pre-retirement, post-	Updated to a more current mortality table - RP-2014
retirement healthy, and disabled)	projected to 2020
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 fit experience
Salary Scale	No change
Line of Duty Disability	Decreased rate from 60% to 45%

Schedule of Authority's Share of Net OPEB Liability Group Life Insurance Program For the Year Ended June 30, 2018

Share of County of Frederick, Virginia's VRS Group Life Insurance Plan:

				Employer's	
				Proportionate Share	
		Employer's		of the Net GLI OPEB	
	Employer's	Proportionate		Liability (Asset)	Plan Fiduciary
	Proportion of the	Share of the	Employer's	as a Percentage of	Net Position as a
	Net GLI OPEB	Net GLI OPEB	Covered	Covered Payroll	Percentage of Total
Date	Liability (Asset)	Liability (Asset)	Payroll	(3)/(4)	GLI OPEB Liability
(1)	(2)	(3)	 (4)	(5)	(6)
2017	0.0737% \$	1,109,103	\$ 13,594,320	8.16%	48.86%

Schedule is intended to show information for 10 years. Information prior to the 2017 valuation is not available. However, additional years will be included as they become available.

Schedule of Employer Contributions Group Life Insurance Program For the Years Ended June 30, 2017 through June 30, 2018

				Contributions in					
				Relation to					Contributions
		Contractually		Contractually		Contribution		Employer's	as a % of
	Required		Required	Required Deficiency		Covered	Covered		
		Contribution		Contribution		(Excess)		Payroll	Payroll
Date		(1)		(2)		(3)		(4)	(5)
2018	\$	72,628	\$	72,628	\$	-	\$	14,285,071	0.51%
2017		69,387		69,387		-		13,594,320	0.51%

Schedule is intended to show information for 10 years. Information prior to the 2017 valuation is not available. However, additional years will be included as they become available.

Notes to Required Supplementary Information Group Life Insurance Program 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-retirement healthy, and disabled)	Updated to a more current mortality table - RP-2014 projected to 2020			
Retirement Rates	Lowered rates at older ages and changed final retirement from 70 to 75			
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service			
Disability Rates	Adjusted rates to better match experience			
Salary Scale	No change			
Line of Duty Disability	Increased rate from 14% to 25%			

#### **Teachers**

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

# **SPORS Employees**

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

# VaLORS Employees

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

Notes to Required Supplementary Information Group Life Insurance Program For the Year Ended June 30, 2018 (Continued)

# **JRS Employees**

Mortality Rates (pre-retirement, post-	Updated to a more current mortality table - RP-2014 projected to			
retirement healthy, and disabled)	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

	<u> </u>
Mortality Rates (pre-retirement, post-	Updated to a more current mortality table - RP-2014 projected to
retirement healthy, and disabled)	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

3 1 3	1 3
Mortality Rates (pre-retirement, post-	Updated to a more current mortality table - RP-2014 projected to
retirement healthy, and disabled)	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

angost for Essanty Employers Trazarasas Baty Employees					
Mortality Rates (pre-retirement, post-	Updated to a more current mortality table - RP-2014 projected to				
retirement healthy, and disabled)	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

3 1 3	3 1 3			
Mortality Rates (pre-retirement, post-	Updated to a more current mortality table - RP-2014 projected to			
retirement healthy, and disabled)	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%			

- OTHER SUPPLEMENT	ARY INFORMATION -	

# Schedule of Revenues, Expenditures and Changes in Fund Balance Budgetary Basis Year Ended June 30, 2018

		Original Budget	Amended Budget	Actual	Variance Positive (Negative)
Operating revenues:					
Care of prisoners:					
Local and other per diems	\$	13,200,205 \$	13,200,205 \$	13,200,126 \$	(79)
Commonwealth of Virginia jail costs		1,400,000	1,400,000	1,246,476	(153,524)
Federal		-	-	885	885
Work release		379,828	379,828	339,992	(39,836)
Other	_	601,935	601,935	645,494	43,559
Total operating revenues	\$_	15,581,968 \$	15,581,968 \$	15,432,973 \$	(148,995)
Operating expenditures:					
Personnel	\$	10,790,392 \$	10,743,866 \$	10,201,277 \$	542,589
Fringes		5,096,009	5,142,535	4,624,888	517,647
Contractual		1,374,565	1,354,215	1,042,100	312,115
Other charges		3,442,396	3,272,377	2,731,576	540,801
Capital outlay		74,500	273,500	154,788	118,712
Total operating expenses	\$_	20,777,862 \$	20,786,493 \$	18,754,629 \$	2,031,864
Net operating income (loss)	\$_	(5,195,894) \$	(5,204,525) \$	(3,321,656) \$	1,882,869
Nonoperating revenues (expenses):  Commonwealth of Virginia State					
Compensation Board	\$	5,250,000 \$	5,250,000 \$	5,450,677 \$	200,677
Other State grants		523,869	523,869	531,008	7,139
Interest and investment earnings		-	-	121,585	121,585
Principal payment on long-term debt		(982,500)	(982,500)	(982,500)	-
Interest and Bond Issuance Cost	_	(603,456)	(606,006)	(605,956)	50
Net nonoperating revenues (expenses)	\$_	4,187,913 \$	4,185,363 \$	4,514,814 \$	329,451
Excess (deficiency) of revenues					
over (under) expenditures	\$_	(1,007,981) \$	(1,019,162) \$	1,193,158 \$	2,212,320
Change in fund balance	\$	(1,007,981) \$	(1,019,162) \$	1,193,158 \$	2,212,320
Fund balance, beginning of year	_	1,007,981	1,019,162	9,026,135	8,006,973
Fund balance, end of year	\$_	- \$	- \$	10,219,293 \$	10,219,293

This schedule is presented on the budgetary basis which is the modified accrual basis of accounting.

Reconciliation of the Schedule of Revenues, Expenditures, and Changes in Fund Balance - Budgetary Basis to the Statement of Net Position and Statement of Revenues, Expenses and Changes in Net Position Year Ended June 30, 2018

Fund balance, end of year	\$	10,219,293
Capital assets, net of accumulated depreciation		24,985,742
Deferred charge on refunding		690,446
Pension deferrals - deferred outflows		2,002,069
OPEB deferrals - deferred outflows		117,297
Long-term debt		(16,754,455)
Net pension liability		(5,105,950)
Net OPEB liability		(1,109,103)
Compensated absences		(1,412,729)
OPEB deferrals - deferred inflows		(123,272)
Pension deferrals - deferred inflows	_	(1,447,575)
Net position, per Statement of Net Position	\$_	12,061,763
Reconciliation of excess (deficiency) of revenues over (under)		
expenditures to change in net position per the Statement of		
Revenues, Expenses, and Changes in Net Position:		
Change in fund balance	\$	1,193,158
Purchase of capital assets		154,787
Depreciation expense		(1,114,053)
Principal payment on long-term debt		982,500
Amortization of bond premium/refunding		62,536
Increase (decrease) in pension deferred outflows of resources		(1,130,474)
Increase (decrease) in OPEB deferred outflows of resources		47,697
(Increase) decrease in compensated absences		(45,665)
(Increase) decrease in net pension liability		2,830,580
(Increase) decrease in net OPEB liability		104,637
(Increase) decrease in OPEB deferred inflows of resources		(123,272)
(Increase) decrease in pension deferred inflows of resources		(1,285,883)
Change in net position	\$	1,676,548

# Schedule of Revenues Year Ended June 30, 2018 (With Comparative Totals for 2017)

	_	2018		2017
	Φ.	101 505	Φ.	(0.740
Interest on investments and earnings	\$	121,585	\$	60,749
Commonwealth of Virginia jail costs		1,246,476		1,390,952
Commonwealth of Virginia State Compensation Board		5,450,677		5,469,107
Other State grants		531,008		523,869
Prisoner Housing:		005		4 750
Federal		885		1,752
Work release		339,992		349,422
Miscellaneous		7,855		24,081
Telephone commissions		396,466		408,002
Food and staff reimbursements		90,468		80,707
Electronic monitoring fees		113,846		96,742
Drug testing fees		320		500
Client supervision fees		36,539		30,255
Medical and health reimbursement		74,921		90,181
Local Contributions:				
Clarke		551,259		489,071
Frederick		5,394,459		5,299,912
Winchester		4,910,139		4,429,906
Fauquier	_	2,269,348	_	2,069,337
Total revenues	\$	21,536,243	\$_	20,814,545
% of Local Contributions:				
Clarke		4.20%		3.98%
Frederick		41.10%		43.13%
Winchester		37.41%		36.05%
Fauguier		17.29%		16.84%
i duquici		11.27/0		10.04/0

The schedule has been prepared on the modified accrual basis of accounting.

# Schedule of Expenditures Year Ended June 30, 2018 (With Comparative Totals for 2017)

	_	2018	2017
Personnel	\$	10,201,277	\$ 9,888,423
Fringes		4,624,888	4,321,721
Professional Health Services		795,982	1,107,626
Professional Services		46,194	59,897
Repair and Maintenance		113,711	91,388
Maintenance Service Contracts		51,918	56,277
Printing and Binding		2,707	3,865
Advertising		3,453	760
Contractual Services		28,135	30,166
Gasoline		184	364
Electrical Service		281,751	276,158
Heating Service		81,038	87,417
Water and Sewer		332,234	253,392
Postage and Telephone		46,947	48,034
Internet Access		23,224	23,782
Boiler Insurance		5,969	5,940
Fire Insurance		29,744	30,244
Motor Vehicle Insurance		6,694	6,179
Surety Bonds and Public Officials Liability		12,343	11,533
General Liability Insurance		10,011	9,309
Line of Duty Program		38,429	34,270
Office Supplies		63,626	58,383
Food Supplies and Food Services		913,378	937,237
Food Service - Small Equipment		31,104	17,224
Agricultural Supplies		1,216	5,803
Medical and Laboratory		395,523	449,123
Laundry, Housekeeping, and Janitorial		113,717	96,399
Linen Supplies		8,457	2,509
Repair and Maintenance Supplies		53,571	52,599
Vehicle and Powered Equipment Supplies		15,388	10,464
Police Supplies		50,380	34,920
Uniforms and Wearing Apparel		70,655	64,179
Books and Subscriptions		678	356
Other Operating Supplies		21,861	9,613
Travel		91,925	94,080
Dues and Memberships		2,101	1,701
Operating and Reserve Funding		(2,361)	-
Payment of Unemployment Claims		3,572	3,619
Machinery and Equipment		52,668	178,242
Building Improvements		102,120	1,835,020
Lease/Rent of Equipment		28,217	28,178
Debt Service Payments		-,	-,
Principal		982,500	890,000
Interest and Bond Issuance Cost	_	605,956	654,041
Total expenditures	\$	20,343,085	\$ 21,770,435

The schedule has been prepared on the modified accrual basis of accounting.

# Schedule of Per Diem Rates and Per Diem Revenues Last Five Fiscal Years

# Per Diem Rates

	Non-	Non-
Fiscal Year	Participating	Participating
Ended	Jurisdictions	Jurisdictions
June 30,	 (Local)	(Federal)
2018	\$ 79.32 \$	55.00
2017	79.32	55.00
2016	79.32	79.32
2015	79.32	79.32
2014	79.32	79.32

# Per Diem Revenues

Fiscal Year Ended June 30,	Clarke County	Fauquier County	Frederick County	City of Winchester	Participating Jurisdictions Per Diem Total	Non- Participating Jurisdictions, Including Federal
2018	\$ 551,259 \$	2,269,348 \$	5,394,459 \$	4,910,139 \$	13,125,205 \$	885
2017	489,071	2,069,337	5,299,912	4,429,906	12,288,226	1,752
2016	520,768	1,819,790	5,103,298	4,154,548	11,598,404	1,258
2015	566,954	1,662,775	4,830,537	3,821,772	10,882,038	2,300
2014	542,879	1,438,679	4,467,002	3,549,207	9,997,767	1,747

# Demographic Information of the Service Area

The Authority's service area is spread over the area covered by the Participating Jurisdictions, all of which are located in the northwestern part of Virginia, near Maryland and West Virginia.

The following table shows the total population of the Participating Jurisdictions during the thirty-year period of 1980 to 2010 and the projected population in the year 2020.

Locality	1980	1990	2000	2010	Projected 2020
Clarke County	9,965	12,101	12,652	14,034	15,025
Fauquier County	35,889	48,860	55,139	65,203	74,118
Frederick County	34,150	45,723	59,209	78,305	97,192
City of Winchester	20,217	21,947	23,585	26,203	27,967
Total	100,221	128,631	150,585	183,745	214,302

Sources: Weldon-Cooper Center for Public Service, University of Virginia, for years 1980, 1990, 2000 and 2010. Virginia Employment Commission for 2020 projections.

# Authority Inmate Population Statistics Last Five Fiscal Years

The tables below show the inmate population statistics for the last five fiscal years. The Authority accepts inmates from non-participating jurisdictions (including federal detainees) on a space-available basis.

# Prisoner Man-Days

Fiscal					Non- Participating		
Year	From	From	From	From	Jurisdictions		
Ended	Clarke	Fauquier	Frederick	City of	(other than		
June 30,	County	County	County	Winchester	Federal)	Federal	Total
2018	7,092	39,992	91,323	79,654	2,643	21	220,725
2017	8,539	43,038	93,350	86,602	3,821	32	235,382
2016	10,180	43,529	93,129	96,183	3,813	7	246,841
2015	10,420	41,451	97,631	82,132	1,037	43	232,714
2014	7,919	32,592	88,697	76,038	1,397	33	206,676

# Average Daily Population (ADP)

					Non-		
Fiscal					Participating		
Year	From	From	From	From	Jurisdictions		
Ended	Clarke	Fauquier	Frederick	City of	(other than		
June 30,	County	County	County	Winchester	Federal)	Federal	Total
2018	20.0	110.0	250.0	218.0	7.0	0.06	605.06
2017	23.0	118.0	256.0	237.0	11.0	0.09	645.09
2016	28.0	119.0	255.0	264.0	10.0	0.2	676.2
2015	29.0	114.0	268.0	225.0	3.0	0.2	639.2
2014	21.7	89.3	243.0	208.3	3.8	0.1	566.2

# Participating Jurisdictions - Other Jail Facilities Last Five Fiscal Years

As described in the Regional Jail Agreement, all of the Participating Jurisdictions, except Fauquier County, are required to commit their respective prisoners to the Authority for housing in the Jail Facilities. Fauquier County sends its prisoners to the Jail Facilities on an as-needed basis. Fauquier County maintains its own jail facilities which have a rated capacity of 56 beds. The average daily inmate population housed in the Fauquier County jail facilities for the last five fiscal years is set out in the table below.

Fauquier County Adult Detention Center						
		Average				
Fiscal Year	Rated	Daily				
Ended	Prisoner	Inmate				
June 30,	Capacity	Population				
2018	56	86				
2017	56	82				
2016	56	84				
2015	59	104				
2014	56	103				



# ROBINSON, FARMER, COX ASSOCIATES

CERTIFIED PUBLIC ACCOUNTANTS

A PROFESSIONAL LIMITED LIABILITY COMPANY

Independent Auditors' Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements

Performed in Accordance with Government Auditing Standards

To the Members of the Board Northwestern Regional Jail Authority Winchester, Virginia

We have audited, in accordance with the auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the *Specifications for Audits of Authorities, Boards, and Commissions*, issued by the Auditor of Public Accounts of the Commonwealth of Virginia, the financial statements of the business-type activities of Northwestern Regional Jail Authority as of and for the year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise Northwestern Regional Jail Authority's basic financial statements and have issued our report thereon dated January 8, 2019.

# Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered Northwestern Regional Jail 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 opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of Northwestern Regional Jail Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of Northwestern Regional Jail 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 Northwestern Regional Jail 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.

Charlottesville, Virginia

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January 8, 2019