# APPALACHIAN JUVENILE COMMISSION FINANCIAL REPORT

June 30, 2018

## APPALACHIAN JUVENILE COMMISSION

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### INDEPENDENT AUDITORS' REPORT

To the Board of Directors of Appalachian Juvenile Commission Bristol, Virginia

## Report on the Financial Statements

We have audited the accompanying financial statements of Appalachian Juvenile Commission, which comprise the statement of financial position as of June 30, 2018, and the related statements of activities and cash flows for the year then ended, and the related notes to the financial statements.

### 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 misstatements, 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 and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, and *Specification for Audits of Counties, Cities and Towns* 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 of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control 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 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 Appalachian Juvenile Commission as of June 30, 2018, and the changes in its net assets and its cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

Appalachian Juvenile Commission Page 2

#### Other Matters

## Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the postemployment and net pension liabilities and notes to the required supplementary information be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We 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 methods of preparing the information and comparing the information for consistency with management's responses to our inquires, 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.

#### Accompanying Information

Our audit was conducted for the purpose of forming an opinion on the financial statements as a whole. The Accompanying Schedule of Revenue and Support, Schedule of Revenue from Juvenile Detention, and the Schedule of Expenses are presented for purposes of additional analysis and are not a required part of the financial statements. The Accompanying Schedules are the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated, in all material respects, in relation to the financial statements as a whole.

#### Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated December 19, 2018, on our consideration of the Commission's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering Appalachian Juvenile Commission's internal control over financial reporting and compliance.

Blackley, alinger & associates, PLAC

CERTIFIED PUBLIC ACCOUNTANTS

Bristol, Tennessee December 19, 2018

# APPALACHIAN JUVENILE COMMISSION STATEMENT OF FINANCIAL POSITION June 30, 2018

ASSETS Current Assets Cash and cash equivalents Accounts receivable Prepaid expenses	\$ 2,989,840 25,484 1,630
Deferred Outflows Pension Related OPEB Related Investment - Certificate of Deposit Total Current Assets	162,933 17,602 1,000,000 4,197,489
Property and equipment, net	1,704,700
Total Assets	\$ 5,902,189
LIABILITIES	
Current Liabilities Accounts payable Payroll liabilities Accrued compensated absences and salaries	\$ 25,771 359 183,074
Deferred Inflows Pension related OPEB related	156,321 5,163
Postemployment benefit obligations - Current portion  Total Current Liabilities	28,666 399,354
Long-term Liabilities Deferred pension inflows Pension related OPEB related	241,408 20,145
Net pension liability Postemployment benefit obligations Total Long-term Liabilities	1,018,015 621,160 1,900,728
Total Liabilities	2,300,082
NET ASSETS Unrestricted	3,602,107
Total Liabilities and Net Assets	\$ 5,902,189

The accompanying notes are an integral part of these financial statements.

## APPALACHIAN JUVENILE COMMISSION STATEMENT OF ACTIVITIES Year Ended June 30, 2018

## UNRESTRICTED NET ASSETS SUPPORT AND REVENUE \$ 2,730,534 Local revenue - juvenile detention State revenue - juvenile detention 374,633 State - Commonwealth of Virginia block grant 854,429 43,548 Federal funds 35,317 Interest income 37,601 Miscellaneous Total Unrestricted Support and Revenue 4,076,062 3,636,722 **EXPENSES** 439,340 Increase (Decrease) in Net Assets NET ASSETS AT BEGINNING OF YEAR (Restated) 3,162,767 \$ 3,602,107 NET ASSETS AT END OF YEAR

The accompanying notes are an integral part of these financial statements.

## APPALACHIAN JUVENILE COMMISSION STATEMENT OF CASH FLOWS Year Ended June 30, 2018

CASH FLOWS FROM OPERATING ACTIVITIES		
Increase (decrease) in net assets	\$	439,340
Adjustments to reconcile increase in net assets		
to net cash provided by operating activities:		
Depreciation		97,266
(Increase) decrease in operating assets		
Receivables		(5,759)
Prepaid expense		(150)
Deferred outflows		131,344
Increase (decrease) in operating liabilities		
Accounts payable		(5,999)
Payroll liabilities		(445)
Accrued salaries and compensated absences		20,099
Postemployment benefit obligation (Gain)		309,281
Net pension liability and deferred pension inflows		(237,003)
Net cash provided by operating activities	·	747,974
CASH FLOWS FROM INVESTING ACTIVITIES		
Investments - Certificate of Deposit - Long-term		-
Purchase of property and equipment	Limitarian	(24,836)
Net cash used by investing activities		(24,836)
CASH FLOWS FROM FINANCING ACTIVITIES		
Restatement for OPEB Obligations		(289,822)
Distribution to localities		(110,000)
	_	
Net cash used by financing activities	шалан	(399,822)
Net increase (decrease) in cash and cash equivalents		323,316
CASH AND CASH EQUIVALENTS, Beginning	LANGEMENT	2,666,524
CASH AND CASH EQUIVALENTS, Ending	<u>\$</u>	2,989,840
SUPPLEMENTAL INFORMATION:		
Interest paid	<u>\$</u>	_

The accompanying notes are an integral part of these financial statements.

## NOTE A. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

## **Organizational History**

The Highlands Juvenile Detention Center Commission was organized as of July 1, 1984, and exists by virtue of concurrent resolutions of the counties of Washington, Smyth, and the City of Bristol, all of which are in the Commonwealth of Virginia, which resolutions implement Article 13 of Title 16.1-315 of the Code of Virginia, and as so provided, is a corporate and political public body with all the powers and duties granted to it under the Code of Virginia.

Effective July 1, 2003, the Commission was expanded to allow the counties of Lee, Dickenson, Tazewell, Wise, Russell, Buchanan, Scott and the City of Norton to buy into the Commission's regionalization over a five-year period for approximately \$980,000.

Effective July 1, 2005, Highlands Juvenile Detention Center Commission and Southwest Regional Group Home merged together to enhance the services to the youth of Southwest Virginia. The combined Commissions operate under the umbrella of one Commission known as the Appalachian Juvenile Commission. As of July 1, 2011, the Commission no longer operates the group home.

## **Basis of Accounting**

The accompanying financial statements have been prepared on the accrual method of accounting.

## Cash and Cash Equivalents

Cash and cash equivalents includes all monies in banks and highly liquid investments with maturity dates of three months or less and which are not subject to withdrawal restrictions or penalties.

## **Donated Property and Equipment**

Donations of property and equipment are recorded as contributions at their estimated fair value at the date of donation. Such donations are reported as increases in unrestricted net assets unless the donor has restricted the donated asset to a specific purpose. Assets donated with explicit restrictions regarding their use and contributions of cash that must be used to acquire property and equipment are reported as restricted contributions. Absent donor stipulations regarding how long those donated assets must be maintained, the Organization reports expirations of donor restrictions when the donated or acquired assets are placed in service as instructed by the donor. The Organization reclassifies temporarily restricted net assets to unrestricted net assets at that time.

## NOTE A. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

## **Property and Equipment**

The counties of the Commission jointly own the building the Commission occupies. It was constructed in the year 1972-73 and was occupied in July 1973. The land on which the building resides was donated to the Commission in 1998. The donation was unrestricted. Expenditures for the acquisition of property and equipment with a cost greater than \$1,000 and a useful life of greater than one year are capitalized at cost. Depreciation is provided over the estimated useful lives of the building and improvements (40 years) and equipment and furniture (5-15 years) on the straight-line method.

The Commission reviews the carrying value of property and equipment for impairment whenever events and circumstances indicate that the carrying value of an asset may not be recoverable from the estimated future cash flows expected to result from the use and eventual disposition. In cases where undiscounted expected future cash flows are less than the carrying value, an impairment loss is recognized equal to an amount by which the carrying value exceeds the fair value of assets. The factors considered by management in performing this assessment include current operating results, trends and prospects, the manner in which the property is used, and the effects of obsolescence, demand, competition, and other economic factors. Based on this assessment there was no impairment at June 30, 2018.

## **Employee Benefits**

The cost of employee benefits and compensated absences are accrued as vested to the employee. The Commission does not maintain any unfunded retirement plans. The postemployment and postretirement health benefits are unfunded; thus, no plan assets are set aside for funding.

### **Financial Statement Presentation**

The financial statement presentation follows requirements of the Not-for-Profit Entities Topic of the Financial Accounting Standards Board Accounting Standards Codification. Under the Not-for-Profit Topic, the Commission is required to report information regarding its financial position and activities according to three classes of net assets: unrestricted net assets, temporarily restricted net assets, and permanently restricted net assets.

## **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.

### **Income Taxes**

Appalachian Juvenile Commission is a not-for-profit organization that is exempt from federal income taxes under Internal Revenue Code Section 501 (c) (3) except on net income derived from unrelated business activities. The Commission did not have any unrelated business income subject to tax. The Organization believes that it has appropriate support for any tax positions taken, and as such, does not have any uncertain tax positions that are material to the financial statements.

## NOTE 2. PROPERTY AND EQUIPMENT

Pro	perty	and	equip	pment	at Jun	e 30	, 2018,	consisted	of the	following:
-----	-------	-----	-------	-------	--------	------	---------	-----------	--------	------------

Land	J	\$	111,714
Building and improvements			3,101,938
Equipment & vehicles			526,796
Less accumulated depreciation			3,740,448 2,035,748
Total Property and Equipment		<u>\$</u>	1,704,700

Depreciation expense for the current period is \$97,266.

## NOTE 3. NATURE OF FUNDING POLICIES

State funding to support locally operated adult and juvenile programs is recorded using block grants. In accordance with Virginia Code Sections 16.1-322.1, 16.1-322.2, 16.1-309.6, and 16.1-309.7, the Commission was awarded initial grants, subject to revisions, to supplement the operation of the local correctional programs. The Commission received \$854,429 in Virginia block grant funds and \$362,823 in Juvenile Community Crime Control Act grant funds for the year ended June 30, 2018. Pursuant to Sections 16.1-322.2 and 16.1-309.7 of the Code, any unexpended funds at the end of each fiscal year shall be retained by the locality and subsequently expended for operating expenses of the Commission.

## NOTE 4. CONCENTRATIONS OF RISK

The Commission maintains its operating and capital replacement cash balances at one financial institution located in Bristol TN/VA. The Federal Deposit Insurance Corporation (FDIC) insures accounts up to \$250,000. The bank collateralizes any amounts greater than \$250,000 as public funds.

## NOTE 5. INVESTMENT - CERTIFICATE OF DEPOSITS

On September 29, 2016, the Commission invested in a \$1,000,000 three-year public fund certificate of deposits that matures September 26, 2019. The annual percentage yield rate is .80%. The certificates of deposit have been issued through CDARS (Certificate Deposit Account Register Service) by one or more FDIC-insured depository institutions.

### NOTE 6. RESTATEMENT OF FUND BALANCE

In October, 2011, the commission agreed to return to the localities any profits that exceeded six percent of net income. The beginning net assets on the statement of activities was restated to reflect a return of \$110,000 to the localities for fiscal year 2018.

The beginning net assets was restated to reflect the adoption 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 and inflows of resources, and expense/expenditures related to postemployment benefits other than pension.

Net Position, July 1, 2017, as previously stated	\$	3,562,589
GASB 75 Implementation		(289,822)
Localities Funding Distributions		(110,000)
Net Position, July 1, 2017, restated	<u>\$</u>	3,162,767

## NOTE 7. SUBSEQUENT EVENT

Subsequent events have been evaluated through December 19, 2018, which is the date the financial statements were available to be issued.

## NOTE 8. LEASES

Appalachian Juvenile Commission entered into a lease on May 1, 2014 for additional office space. The terms of this lease is for fourteen months at \$1,112 per month which includes the 27% shared utility cost and terminates on June 30, 2018. The Commission may renew the lease for a one year option for three years. The renewal rate shall be a three percent increase in the basic rental rate plus 27% of shared utility cost.

The projected annual lease amounts for the succeeding three year period based upon the lease agreement are as follows:

## **Schedule of Future Lease Payments:**

Fiscal Year Ending	Basic Rate	Plus Additional Rate
June 30, 2019	\$13,344	Plus 27% of shared utility expense
June 30, 2020	\$13,344	Plus 27% of shared utility expenses
June 30, 2021	\$13,344	Plus 27% of shared utility expenses

Office space rental expense (including 27% shared utility expenses) for June 30, 2018 was \$13,344.

The Commission also has non-material leases for office equipment which are treated as operating leases in the Statement of Activities.

## NOTE 9. OTHER POSTEMPLOYMENT BENEFITS (OPEB) PLAN

The Commission sponsors postemployment health benefits to certain former employees. Effective January 1, 2004, the Commission adopted an unfunded postretirement health and dental plan for all employees.

The ASC 715-60 standard on accounting for postretirement benefits other than pensions requires the following disclosure with regard to the retiree medical insurance liability:

## Description of the Retiree Medical Insurance Plans:

Plan Type:

Pre 65: Statewide funded plan which includes:

Medical (PPO) and Vision - Anthem Blue Cross Blue Shield

Prescription Drugs - Anthem Blue Cross Blue Shield

Behavioral Health and EAP - Anthem Blue Cross Blue Shield

Dental - Delta Dental Plan of Virginia

Details of the above can be found in the "Key Advantage with

Expanded Benefits" plan booklet.

Post 65: Advantage 65, administered by Anthem Blue Cross.

Benefits cease 5 years after date of retirement and are capped at a maximum of \$500 per month.

NOTE 9. OTHER POSTEMPLOYMENT BENEFITS (OPEB) PLAN (Continued)

Eligibility Employees are eligible for benefits at a minimum of age 50 with 20

years of service.

Benefit Cost Sharing Employer's contribution varies according to service at retirement and

is outlined as follows:

i) 20 years of service - 60% benefit.

ii) 25 years of service - 80% benefit.

iii) 30 years of service - 100% benefit.

Spouse and Surviving

Spouse Benefits: There are no spousal or surviving spouse benefits.

Annual Medical Premiums: As of July 1, 2017

Pre-65 \$8,424 Post-65 \$2,412

The following ASC 715-60 disclosures provide a reconciliation of changes in the plan benefit obligations and fair value of assets and a statement of funded status as of June 30, 2018:

A.	Cha	nge in accumulated postretirement benefit obligation		/1/2017 to 6/30/2018		/1/2016 to 6/30/2017
	1.	Postretirement benefit obligation at beginning of year a. Actives not fully eligible to retire b. Actives fully eligible to retire c. Retirees d. Total	\$ \$	208,973 121,645 35,235 365,853	\$	230,706 139,999 7,847 378,552
	2.	Service cost	\$	18,886	\$	19,079
	3.	Interest cost	\$	13,755	\$	10,649
	4.	Amendments		**		-
	5.	Actuarial (gain) loss	\$	31,011	\$	(22,900)
	6.	Benefits paid	\$	(20,007)	\$	(19,527)
	7.	Postretirement benefit obligation at end of year				
		a. Actives not fully eligible to retire	\$	227,718	\$	208,973
		b. Actives fully eligible to retire		153,624		121,645
		c. Retirees		28,146		35,235
		d. Total	\$	409,488	<u>\$</u>	365,853
В.	Cha	ange in plan assets		/1/2017 to 6/30/2018		7/1/2016 to 96/30/2017
	1.	Fair value of plan assets at beginning of year	\$	-	\$	-
	2.	Actual return on plan assets		-		-
	3.	Employer contribution		20,007		19,527
	4.	Benefits paid	-	(20,007)		(19,527)
	5.	Fair value of plan assets at end of year	<u>\$</u>	<del>-</del>	\$	**

## NOTE 9. OTHER POSTEMPLOYMENT BENEFITS (OPEB) PLAN (Continued)

C.	Fun	ded status	(	5/30/2018	6	/30/2017
	1.	Postretirement benefit obligation at end of year	\$	409,488	\$	365,853
	2.	Fair value of plan assets at end of year		4		-
	3.	Funded status end of year	<u>\$</u>	409,488	\$	365,853
	4.	Current liability	\$	21,207	\$	20,173
	5.	Non-current liability		388,281		345,680
	6.	Total	\$	409,488	\$	365,853
D.	Cor	nponents of the net periodic postretirement benefit cost		/1/2017 to 6/30/2018		/1/2017 to 6/30/2018
	1.	Service cost	\$	18,886	\$	19,079
	2.	Interest cost		13,755		10,649
	3.	Return on plan assets		-		-
	4.	Amortization of transition obligation		-		-
	5.	Amortization of prior service cost		-		-
	6.	Amortization of actuarial (gain) loss		1,650	-	-
	7.	Total	\$	34,291	\$	29,728
E.	OP:	EB changes other than net periodic postretirement benefit cost		/1/2017 to 6/30/2018		/1/2016 to 6/30/2017
E.	<b>OP</b> :	EB changes other than net periodic postretirement benefit cost  New prior service cost				
E.		<u> </u>	0		0	
E.	1.	New prior service cost	0	6/30/2018	0	6/30/2017
E.	1. 2.	New prior service cost New actuarial (gain) loss	0	31,001	0	6/30/2017
E. F.	1. 2. 3. 4.	New prior service cost New actuarial (gain) loss Amortization of unrecognized amounts	\$	31,001 (1,650)	\$	6/30/2017 - (22,900) -
	1. 2. 3. 4.	New prior service cost  New actuarial (gain) loss  Amortization of unrecognized amounts  Total	\$ \$ 	31,001 (1,650)	\$	6/30/2017 - (22,900) -
	1. 2. 3. 4. Uni	New prior service cost New actuarial (gain) loss Amortization of unrecognized amounts Total  recognized amounts and amortization amounts in the following year Unrecognized amounts a. Transition obligation	\$	31,001 (1,650) 29,351	\$	6/30/2017 - (22,900) - (22,900)
	1. 2. 3. 4. Uni	New prior service cost New actuarial (gain) loss Amortization of unrecognized amounts Total  recognized amounts and amortization amounts in the following year Unrecognized amounts a. Transition obligation b. Prior service cost	\$ \$ 	31,001 (1,650) 29,351 6/30/2018	\$	6/30/2017 - (22,900) - (22,900) 5/30/2017 -
	1. 2. 3. 4. Uni	New prior service cost New actuarial (gain) loss Amortization of unrecognized amounts Total  recognized amounts and amortization amounts in the following year Unrecognized amounts a. Transition obligation b. Prior service cost c. Net actuarial (gain) / loss	\$	6/30/2018 - 31,001 (1,650) 29,351 6/30/2018 - - 39,728	\$	6/30/2017 - (22,900) - (22,900) (22,900) 6/30/2017 - 10,377
	1. 2. 3. 4. Uni	New prior service cost New actuarial (gain) loss Amortization of unrecognized amounts Total  recognized amounts and amortization amounts in the following year Unrecognized amounts a. Transition obligation b. Prior service cost	\$ \$ 	31,001 (1,650) 29,351 6/30/2018	\$	6/30/2017 - (22,900) - (22,900) 5/30/2017 -
	1. 2. 3. 4. Uni	New prior service cost New actuarial (gain) loss Amortization of unrecognized amounts Total  recognized amounts and amortization amounts in the following year Unrecognized amounts a. Transition obligation b. Prior service cost c. Net actuarial (gain) / loss	\$	6/30/2018 - 31,001 (1,650) 29,351 6/30/2018 - - 39,728	\$	6/30/2017 - (22,900) - (22,900) (22,900) 6/30/2017 - 10,377
	1. 2. 3. 4. <b>Uni</b> 1.	New prior service cost New actuarial (gain) loss Amortization of unrecognized amounts Total  recognized amounts and amortization amounts in the following year Unrecognized amounts a. Transition obligation b. Prior service cost c. Net actuarial (gain) / loss d. Total  Amortization amounts in the following year (estimate) a. Transition obligation	\$	6/30/2018 - 31,001 (1,650) 29,351 6/30/2018 - - 39,728	\$	6/30/2017 - (22,900) - (22,900) (22,900) 6/30/2017 - 10,377
	1. 2. 3. 4. <b>Uni</b> 1.	New prior service cost New actuarial (gain) loss Amortization of unrecognized amounts Total  recognized amounts and amortization amounts in the following year Unrecognized amounts a. Transition obligation b. Prior service cost c. Net actuarial (gain) / loss d. Total  Amortization amounts in the following year (estimate) a. Transition obligation b. Prior service cost	\$	6/30/2018 - 31,001 (1,650) 29,351 6/30/2018 - - 39,728	\$ \$	6/30/2017 - (22,900) - (22,900) (22,900) 6/30/2017 - 10,377
	1. 2. 3. 4. <b>Uni</b> 1.	New prior service cost New actuarial (gain) loss Amortization of unrecognized amounts Total  recognized amounts and amortization amounts in the following year Unrecognized amounts a. Transition obligation b. Prior service cost c. Net actuarial (gain) / loss d. Total  Amortization amounts in the following year (estimate) a. Transition obligation	\$	6/30/2018 - 31,001 (1,650) 29,351 6/30/2018 - - 39,728	\$ \$	6/30/2017 - (22,900) - (22,900) (22,900) 6/30/2017 - 10,377

## NOTE 9. OTHER POSTEMPLOYMENT BENEFITS (OPEB) PLAN (Continued)

1.	Actı	uarial assumptions	6/	30/2018	6/30/2017
	a.	Medical / drug trend rate next year		6.00%	 6.00%
	b.	Ultimate trend rate		4.50%	4.50%
	c.	Year ultimate trend rate is achieved		2021	2020
	d.	Discount rate used to value end of year			
		accumulated postretirement benefit obligations		3.87%	3.41%
	e.	Discount rate used to value net periodic			
		postretirement benefit cost		3.41%	2.96%
2.	Effe	ect of a 1% increase in health care cost trend rate on:			
	a.	Interest cost plus service cost	\$	2,606	\$ 2,686
	b.	Accumulated postretirement benefit obligation	\$	22,712	\$ 22,864
3.	Effe	ect of a 1% decrease in health care cost trend rate on:			
	a.	Interest cost plus service cost	\$	(2,250)	\$ (2,358)
	b.	Accumulated postretirement benefit obligation	\$	(2,035)	\$ (20,675)
4.	Mea	asurement date	6/	30/2018	6/30/2017

## H. Estimated future benefit payments

G.

Benefit payments are shown net of employee contribution.

	Estir	Estimated		
Year Beginning July 1st:	Employe	er Payment		
2018	\$	21,207		
2019	\$	22,452		
2020	\$	27,275		
2021	\$	30,694		
2022	\$	36,731		
2023 - 2027	\$	149,439		

## I. Expected employer contribution for next fiscal year

For non-funded plans, employer contributions equal benefit payments (above) for net of retiree contributions for the next fiscal year.

2010	<b>P</b>	21,207
2018	D)	21,207

The total postemployment benefit obligation is reflected on the Statement of Financial Position as follows:

Postemployment benefit obligation - current	\$ 21,207
Postemployment benefit obligation - long term	 388,281
	\$ 409,488

## NOTE 10. HEALTH INSURANCE CREDIT (HIC) OPEB PLAN

### Summary of Significant Accounting Policies

#### Health Insurance Credit Program

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

## General Information about the Political Subdivision Health Insurance Credit Program

#### Plan Description

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

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

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

#### Eligible Employees

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

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

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

### Benefit Amounts

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

- . At Retirement For employees who retire, the monthly benefit is \$1.50 per year of service per month with a maximum benefit of \$45.00 per month.
- . <u>Disability Retirement</u> For employees who retire on disability or go on long-term disability under the Virginia Local Disability Program (VLDP), the monthly benefit is \$45 per month.

## NOTE 10. HEALTH INSURANCE CREDIT (HIC) OPEB PLAN (Continued)

#### Health Insurance Credit Program Notes:

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

### Employees Covered by Benefit Terms

As of the June 30, 2017 actuarial valuation, the following employees were covered by the benefit terms of the HIC OPEB plan:

	Number
Inactive members or their beneficiaries currently receiving benefits	15
Inactive members:	
Vested inactive members	0
Non-vested Inactive members	0
Inactive members active elsewhere in VRS	15
Active members	50
Total covered employees	65

#### Contributions

The contribution requirement for active employees is governed by §51.1-1402(E) of the *Code of Virginia*, as amended, but may be impacted as a result of funding options provided to political subdivisions by the Virginia General Assembly. The political subdivision's contractually required employer contribution rate for the year ended June 30, 2018 was .40% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2015. The actuarially determined rate was expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Contributions from the political subdivision to the Political Subdivision Health Insurance Credit Program were \$7,653 and \$7,625 for the years ended June 30, 2018 and June 30, 2017, respectively.

## Net HIC OPEB Liability

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

## NOTE 10. HEALTH INSURANCE CREDIT (HIC) OPEB PLAN (Continued)

## **Actuarial Assumptions**

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

Inflation	2.5 percent
Salary increases, including inflation –	
Locality – General employees	3.5 percent – 5.35 percent
Locality – Hazardous Duty employees	3.5 percent – 4.75 percent
Investment rate of return	7.0 Percent, net of investment
	expenses,
	including inflation*

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

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

#### Pre-Retirement:

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

#### Post-Retirement:

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

## Post-Disablement:

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

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

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

## NOTE 10. HEALTH INSURANCE CREDIT (HIC) OPEB PLAN (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 Life Mortality Table projected with scale BB to 2020; males set forward 2 years, 110% of rates; females 125% of rates

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

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

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

### Pre-Retirement:

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

## Post-Retirement:

RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with Scale BB to 2020; males set forward 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years.

### Post-Disablement:

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

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

## NOTE 10. HEALTH INSURANCE CREDIT (HIC) OPEB PLAN (Continued)

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

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

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

### 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:

## NOTE 10. HEALTH INSURANCE CREDIT (HIC) OPEB PLAN (Continued)

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

## Schedule of Changes in Net HIC OPEB Liability:

		•	•		
		Increase (l	Decrease)		
Total H	IC OPEB	Plan Fiduciary Net Position		Net HIC OPEB Liability	
Lia	bility				
	(a)	(b)		(a) -	(b)
\$	110,243	\$	21,977	\$	88,266
	2,365		-		2,365
	7,448		-		7,448
	-	-			-
					-
	-		-		-
	(2,943)		-		(2,943)
	-		7,625		(7,625)
	_		2,536		(2,536)
	(7,691)		(7,691)		-
	-				42
	•		129		(129)
	(821)		2,557		(3,378)
***************************************	109,422	CONTRACTOR ACCURATION.	24,534		84,888
	Total H.	Total HIC OPEB Liability (a) \$ 110,243  2,365 7,448  (2,943)  (7,691)  (821)	Increase (I   Total HIC OPEB   Plan Fiduce (I   Plan Fi	Increase (Decrease)   Total HIC OPEB   Plan Fiduciary Net	Increase (Decrease)

## NOTE 10. HEALTH INSURANCE CREDIT (HIC) OPEB PLAN (Continued)

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

The following presents the total OPEB liability of the Commission, as well as what the total OPEB liability would be if were calculated using a discount rate that is one percentage point lower (6.00%) or on percentage point higher (8.%) than the current discount rate:

	1.0 Dec: (6.0		ľ	Current Discount 7.00%)	I	1.00% increase (8.00%)
Plan's Net OPEB Liability	\$	96,025	\$	84,888	\$	75,384

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

For the year ended June 30, 2018, the Commission recognized OPEB expense \$7,555. At June 30, 2018, the Commission reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	_ +	l Outflows sources	Deferred Inflows of Resources		
Differences between expected and actual experience	\$	_	\$	**	
Change in assumptions Net differences between projected and actual earnings on HIC OPEB Plan investments Employer contributions subsequent to the measurement		-		2,510 798	
date*	***************************************	7,653		-	
Total	\$	7,653	\$	3,308	

\$7,653 reported as deferred outflows of resources related to the HIC OPEB resulting from the Commission's contributions subsequent to the measurement date will be recognized as a reduction of the Net HIC OPEB Liability in the Fiscal Year ending June 30, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the HIC OPEB will be recognized in the HIC OPEB expense in future reporting periods as follows:

Year ended June 30:	
Year 1 (2019)	\$ (632)
Year 2 (2020)	\$ (632)
Year 3 (2021)	\$ (632)
Year 4 (2022)	\$ (632)
Year 5 (2023)	\$ (433)
Thereafter	\$ (347)

NOTE 11. GROUP LIFE INSURANCE (GLI) PROGRAM OPEB PLAN

## **Summary of Significant Accounting Policies**

### Group Life Insurance

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

## General Information about the Group Life Insurance Program Plan Description

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

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

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

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 Schools Board	GROUP LIFE INSURANCE PROGRAM PLAN PROVISIONS			
subdivisions that elect the program, including the following employers that do not participate in VRS for retirement:  City of Richmond  City of Portsmouth  City of Roanoke  City of Norfolk  Roanoke City Schools Board	ligible Employees			
<ul> <li>□ City of Richmond</li> <li>□ City of Portsmouth</li> <li>□ City of Roanoke</li> <li>□ City of Norfolk</li> <li>□ Roanoke City Schools Board</li> </ul>				
☐ City of Portsmouth ☐ City of Roanoke ☐ City of Norfolk ☐ Roanoke City Schools Board	ibdivisions that elect the program, including the following employers that do not participate in VRS for retirement:			
<ul> <li>☐ City of Roanoke</li> <li>☐ City of Norfolk</li> <li>☐ Roanoke City Schools Board</li> </ul>	City of Richmond			
☐ City of Norfolk ☐ Roanoke City Schools Board	City of Portsmouth			
☐ Roanoke City Schools Board	City of Roanoke			
	City of Norfolk			
Basic group life insurance coverage is automatic upon employment. Coverage end for employees who leave their position	asic group life insurance coverage is automatic upon employment. Coverage end for employees who leave their positi			
before retirement eligibility or who take a refund of their member contributions and accrued interest.	efore retirement eligibility or who take a refund of their member contributions and accrued interest.			

NOTE 11. GROUP LIFE INSURANCE (GLI) PROGRAM (OPEB) PLAN (Continued)

Benefit Amounts
The benefits payable under the Group Life Insurance Program have several components.
☐ Natural Death Benefit – The natural death benefit is equal to the employee's covered compensation rounded
to the next highest thousand and then doubled.
<ul> <li>Accidental Death Benefit – The accidental death benefit is double the natural death benefit.</li> </ul>
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
o Safety belt benefit
o Repatriation benefit
o Felonious assault benefit
o Accelerated death benefit option
Reduction in benefit Amounts
The benefit amounts provided to members covered under the Group Life Insurance Program are subject to a reduction
factor. The benefit amount reduces by 25% on January 1 following one calendar year of separation. The benefit amoun
reduces by an additional 25% on each subsequent January 1 until it reaches 25% of its original value.

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

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

### **Contributions**

The contribution requirements for the Group Life Insurance Program are governed by §51.1-506 and §51.1-508 of the *Code of Virginia*, as amended, but may be impacted as a result of funding provided to state agencies and school divisions by the Virginia General Assembly. The total rate for the Group Life Insurance Program was 1.31% of covered employee compensation. This was allocated into an employee and an employer component using a 60/40 split. The employee component was 0.79% (1.31% X 60%) and the employer component was 0.52% (1.31% X 40%). Employers may elect to pay all or part of the employee contribution, however the employer must pay all of the employer contribution. Each employer's contractually required employer contribution rate for the year ended June 30, 2018 was 0.52% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2015. The actuarially determined rate, when combined with employee contributions, was expected to finance the costs of benefits payable during the year, with an additional amount to finance any unfunded accrued liability. Contribution to the Group Life Insurance Program from the entity were \$9,949 and \$9,912 for the years ended June 30, 2018 and June 30, 2017, respectively.

NOTE 11. 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

At June 30, 2018, the entities reported a liability of \$ [Schedule D – Net OPEB Liability – Group Life Insurance Plan, 6/30/2017 Net OPEB Liability] 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 [Schedule A – Proportionate Share of Contributions – Group Life Insurance Plan, 2017 Employer Allocation Percentage] % as compared to [Schedule A – Proportionate Share of Contributions – Group Life Insurance Plan, 2016 Employer Allocation Percentage] % at June 30, 2016.

For the year ended June 30, 2018, the participating employer recognized GLI OPEB expense of [Schedule B – Schedule of Deferred Inflows and Outflows and OPEB Expense – Group Life insurance Plan, Total Employer OPEB Expense]. 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.

	 l Outflows sources	 Deferred Inflows of Resources
Differences between expected and actual experience Net differences between projected and actual earnings	\$ -	\$ 3,000
on HIC OPEB Plan investments	-	6,000
Change in assumptions		8,000
Change in proportionate share Employer contributions subsequent to the measurement		5,000
date	 9,949	 -
Total	\$ 9,949	\$ 22,000

\$9,949 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:

ear ended June 30:	
Year 1 (2019)	\$ (4,531)
Year 2 (2020)	\$ (4,531)
Year 3 (2021)	\$ (4,531)
Year 4 (2022)	\$ (4,531)
Year 5 (2023)	\$ (2,672)
Thereafter	\$ (1,203)

## NOTE 11. 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 percent
Salary increases, including inflation	
General state employees	3.5 percent – 5.35 percent
Teachers	3.5 percent – 5.95 percent
SPORS employees	3.5 percent – 4.75 percent
VaLORs employees	3.5 percent – 4.75 percent
JRS employees	4.5 percent
Locality - General employees	3.5 percent – 5.35 percent
Locality - Hazardous Duty em	ployees 3.5 percent – 4.75 percent
Investment rate of return	7.0 Percent, net of 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 the OPEB liabilities.

## Mortality rates - General State Employees

#### Pre-Retirement:

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

### Post-Retirement:

RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with Scale BB to 2020; males set forward 1 year; females set back 1 year with 1.5% increase compounded from ages 70 to 85.

### Post-Disablement:

RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males 115% of rates; females 130% of rates.

## NOTE 11. GROUP LIFE INSURANCE (GLI) PROGRAM OPEB PLAN (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 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 Health Annuitant Rates at ages 50 and older projected with scale BB to 2020; males 1% increase compounded from ages 70 to 90; females set back 3 years with 1.5% increase compounded from ages 65 to 70 and 2.0% increase compounded from ages 75 to 90.

### Post-Disablement:

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

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

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

### NOTE 11. GROUP LIFE INSURANCE (GLI) PROGRAM OPEB PLAN (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 Life Mortality Table projected with scale BB to 2020; males set forward 2 years; unisex using 100% male.

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

	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%

## Mortality rates - VaLORS Employees

#### Pre-Retirement:

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

## Post-Retirement:

RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with Scale BB to 2020; males set forward 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years. Post-Disablement:

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

## NOTE 11. GROUP LIFE INSURANCE (GLI) PROGRAM OPEB PLAN (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 and reduced margin for future improvement in accordance with experience
Retirement Rates	Increased age 50 rates and lowered rates at older ages
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Decreased rate from 50% to 35%

## Mortality rates - JRS Employees

### Pre-Retirement:

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

### Post-Retirement:

RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males set forward 1 year; females set back 1 year with 1.5% compounding increase from ages 70 to 85. Post-Disablement:

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

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

Mortality Rates (Pre-retirement, post- 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
Line of Duty Disability	Increased rate from 14% to 20%

### NOTE 11. GROUP LIFE INSURANCE (GLI) PROGRAM OPEB PLAN (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 Life Mortality Table projected with scale BB to 2020; males set forward 2 years, 110% of rates; females The actuarial assumptions used in the June 30, 2016 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016. Changes to the actuarial assumptions as a result of the experience study are as follows:

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%

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

### Pre-Retirement:

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

#### Post-Retirement:

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

#### Post-Disablement:

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

## NOTE 11. GROUP LIFE INSURANCE (GLI) PROGRAM OPEB PLAN (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 and extended final retirement age from 70 to 75.	
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year	
Disability Rates	Lowered disability rates	
Salary Scale	No change	
Line of Duty Disability	Increased rate from 14 to 15%	

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

## Pre-Retirement:

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

### Post-Retirement:

RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with Scale BB to 2020; males set forward 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years. Post-Disablement:

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

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

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

NOTE 11. GROUP LIFE INSURANCE (GLI) PROGRAM OPEB PLAN (Continued)

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

### Pre-Retirement:

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

#### Post-Retirement:

RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with Scale BB to 2020; males set forward 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years.

#### Post-Disablement:

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

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

Mortality Rates (Pre-retirement, post- retirement healthy, and disabled)	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 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 11. 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 11. 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:

	% Decrease 6.00%)	nt Discount e (7.00)%	% Increase (8.00%
Employer's proportionate share of the GLI Program			
Net OPEB Liability	\$ 201,060	\$ 155,450	\$ 118,480

## 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 12. PENSION PLANS

### **Defined Contribution Plan:**

The Commission has a 457 defined contribution plan which is 100% funded by employee contributions.

## Pensions - Virginia Retirement System

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

## Plan Description

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

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

## NOTE 12. PENSION PLANS (VRS) (Continued)

RETIREMENT PLAN PROVISIONS					
PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN			
Plan I is a defined benefit plan. The retirement benefit is based on a member's age, creditable service and average final compensation at retirement using a formula. Employees are eligible for Plan 1 if their membership date is before July 1, 2010, and they were vested as of January 1, 2013.	member's age, creditable service and average final compensation at retirement using a formula.	The Hybrid Retirement Plan combines the features of a defined benefit plan and a defined contribution plan. Most members hired on or after January 1, 2014, are in this plan, as well as Plan 1 and Plan 2 members who were eligible and opted into the plan during a special election window. (see "Eligible Members")  • The defined benefit is based on a member's age, creditable service and average final compensation at retirement using a formula.  • The benefit from the defined contribution component of the plan depends on the member and employer contributions made to the plan and the investment performance of those contributions.  • In addition to the monthly benefit payment payable from the defined benefit plan at retirement, a member may start receiving distributions from the balance in the defined contributions, investment gains or losses, and any required fees.			

## NOTE 12. PENSION PLANS (VRS) (Continued)

PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
Eligible Members	Eligible Members	Eligible Members
Employees are in Plan 1 if their	Employees are in Plan 2 if their	Employees are in the Hybrid Retirement
membership date is before July 1,	membership date is on or after July	Plan if their membership date is on or after
2010, and they were vested as of	1, 2010, or their membership date is	January 1, 2014. This includes:
January 1, 2013.	before July 1, 2010, and they were	• Political subdivision employees*
Hybrid Opt-In Election	not vested as of January 1, 2013.	• Members in Plan 1 or Plan 2 who elected
VRS non-hazardous date covered	Hybrid Opt-In Election	to opt into the plan during the election
Plan 1 members were allowed to	Eligible Plan 2 members were	window held January 1-April 30, 2014; the
make an irrevocable decision to opt	allowed to make an irrevocable	plan's effective date for opt-in members
into the Hybrid Retirement Plan	decision to opt into the Hybrid	was July 1, 2014
	Retirement Plan during a special	*Non-Eligible Members
January 1, through April 30, 2014.	election window held January 1,	Some employees are not eligible to
	through April 30, 2014.	participate in the Hybrid Retirement plan.
for eligible Plan 1 members who	The Hybrid Retirement Plan's	They include:
opted in was July 1, 2014.	effective date for eligible Plan 2	• Political subdivision employees who are
If eligible deferred members return to	members who opted in was July 1,	covered by enhanced benefits for
work during the election window, they	2014.	hazardous duty employees.
were also eligible to opt into the	If eligible deferred members return	Those employees eligible for an optional
Hybrid Retirement Plan.	to work during the election window,	retirement plan (ORP) must elect the ORP
Members who were eligible for an	they were also eligible to opt into	plan or the Hybrid Retirement Plan.
optional retirement plan (ORP) and	the Hybrid Retirement Plan.	If these members have prior service under
had prior service under Plan 1 were	Members who were eligible for an	Plan 1 or Plan 2, they are not eligible to
not eligible to elect the Hybrid	optional retirement plan (ORP) and	elect the Hybrid Retirement Plan and must
Retirement Plan and remain as Plan 1	have prior service under Plan 2	select Plan 1 or Plan 2 (as applicable) or
or ORP.	were not eligible to elect the Hybrid	ORP.
	Retirement Plan and remain as Plan	
	2 or ORP.	
	<u> </u>	<u> </u>

#### NOTE 12. PENSION PLANS (VRS) (Continued)

PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
Retirement Contributions	Retirement Contributions	Retirement Contributions
Employees contribute 5% of their	Employees contribute 5% of their	A member's retirement benefit is funded
compensation each month to their	compensation each month to their	through mandatory and voluntary
member contribution account through	member contribution account	contributions made by the member and the
a pre-tax salary reduction. Some	through a pre-tax salary reduction.	employer to both the defined benefit and
political subdivisions elected to phase		the defined contribution components of the
in the required 5% member	to phase in the required 5% member	plan. Mandatory contributions are based
contribution but all employees will be	contribution but all employees will	on a percentage of the employee's
paying the full 5% by July 1, 2016.	be paying the full 5% by July 1,	creditable compensation and are required
Member contributions are tax-	2016.	from both the member and the employer.
deferred until they are withdrawn as		Additionally, members may choose to
part of a retirement benefit as a		make voluntary contributions to the
refund. The employer makes a		defined contribution component of the
separate actuarially determined		plan, and the employer is required to
contribution to VRS for all covered		match those voluntary contributions
employees. VRS invests both		according to specified percentages.
member and employer contributions		
to provide funding for the future		
benefit payment.		

#### Creditable Service

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

#### 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 in 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.

## Defined Contributions Component: Under the defined contribution component, creditable service is used to determine vesting for the employer contribution portion of the plan.

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NOTE 12. PENSION PLANS (VRS) (Continued)

	Vesting	Vesting
Vesting is the minimum length of	7 71 1	
	Same as Plan 1.	Defined Benefit Component:
service a member needs to qualify for		Defined benefit vesting is the minimum
a future retirement benefit. Members		length of service a member needs to
become vested when they have at		qualify for a future retirement benefit.
least five years (60 months) of		Members are vested under the defined
creditable service.		benefit component of the Hybrid
Vesting means members are eligible		Retirement Plan when they reach five
to qualify for retirement if they meet		years (60 months) of creditable service.
the age and service requirements for		Plan 1 or Plan 2 members with at least five
their plan.		years (60 months) of creditable service
Members also must be vested to		who opted into the Hybrid Retirement Plan
receive a full refund of their member		remain vested in the defined benefit
contribution account balance if they		component.
leave employment and request a		Define Contributions Component:
refund.		Defined contribution vesting refers to the
Members are always 100% vested in		minimum length of service a member
the contributions that they make.		needs to be eligible to withdraw the
		employer contributions from the defined
-		contribution component of the plan.
		Members are always 100% vested in the
		contributions that they make.
		Upon retirement of leaving covered
		employment, a member is eligible to
		withdraw a percentage of employer
1		contribution to the defined contribution
	,	component of the plan, base on service.
		After two years, a member is 50% vested
		and may withdraw 50% of employer
		contributions.
		• After three years, a member is 75%
		vested and may withdraw 75% of
		employer contributions.
		After four or more years, a member is
		100% vested and may withdraw 100% of
		employer contributions.
		Distribution is not required by law until
		age 70 1/2.

NOTE 12. PENSION PLANS (VRS) (Continued)

PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
Calculating the Benefit	Calculating the Benefit	Calculating the Benefit
The Basis Benefit is calculated based	See definition under Plan 1.	Defined Benefit Component:
on a formula using the member's		See definition under Plan 1.
average final compensation, a		Defined Contribution Component:
retirement multiplier and total service		The benefit is based on contributions made
credit at retirement. It is one of the		by the member and any matching
benefit payout options available to a		contributions made by the employer, plus
member at retirement.		net investment earnings on those
An early retirement reduction factor is		contributions.
applied to the Basic Benefit if the		
member retires with a reduced		
retirement benefit or selects a benefit		
payout option other than the Basis		
Benefit.		
	•	
Average Final Compensation	Average Final Compensation	Average Final Compensation
A member's average final	A member's average final	Same as Plan 2. It is used in the retirement
compensation is the average of the 36	J	formula for the defined benefit component
consecutive months of highest	60 consecutive months of highest	of the plan.
compensation as a covered employee.	compensation as a covered	
	employee.	
Service Retirement Multiplier	Service Retirement Multiplier	Service Retirement Multiplier
VRS:	VRS:	Defined Benefit Component:
The retirement multiplier is a factor	Same as Plan 1 for service earned,	VRS:
used in the formula to determine a	purchased or granted prior to	The retirement multiplier for the defined
final retirement benefit. The	January 1, 2013. For non-	benefit component is 1.00%.
retirement multiplier for non-	hazardous duty members the	For members who opted into the Hybrid
hazardous duty members is 1.70%.	retirement multiplier is 1.65% for	Retirement Plan from Plan 1 or Plan 2, the
Sheriffs and regional jail	creditable service earned, purchased	applicable multipliers for those plans will
superintendents:	or granted on or after January 1,	be used to calculate the retirement benefit
The retirement multiplier for sheriffs	2013.	for service credited in those plans.
and regional jail superintendents is	Sheriffs and regional jail	Sheriffs and regional jail
1.85%.	superintendents:	superintendents:
Political subdivision hazardous	Same as Plan 1.	Not applicable.
duty employees:	Political subdivision hazardous	Political subdivision hazardous duty
The retirement multiplier of eligible	duty employees:	employees:
political subdivision hazardous duty	Same as Plan 1.	Not applicable.
employees other than sheriffs and		Defined Contribution Component:
regional jail superintendents is 1.70%	1	Not applicable.
or 1.85% as elected by the employer.		

NOTE 12. PENSION PLANS (VRS) (Continued)

PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
Normal Retirement Age VRS:	Normal Retirement Age VRS:	Normal Retirement Age
Age 65.	Normal Social Security retirement	Defined Benefit Component:
Political subdivisions hazardous	age.	VRS Same as Plan 2.
duty employees:	Political subdivisions hazardous	Political subdivisions hazardous duty
Age 60.	duty employees:	employees:
	Same as Plan 1.	Not applicable.
		Defined Contribution Component:
		Members are eligible to receive
		distributions upon leaving employment,
		subject to restrictions.
Earliest Unreduced Retirement	Earliest Unreduced Retirement	Earliest Unreduced Retirement
Eligibility	Eligibility	Eligibility
VRS: Age 65 with at least five years	VRS:	Defined Benefit Component:
(60 months) of creditable service or	Normal Social Security retirement	VRS:
age 50 with a least 30 years of	age with at least five years (60	Normal Social Security retirement age
creditable service.	months) of creditable service or	with at least five years (60 months) of
Political subdivisions hazardous	when their age and service equal	creditable service or when their age and
duty employees:	90.	service equal 90.
Age 60 with at least five years of	Political subdivisions hazardous	Political subdivisions hazardous duty
creditable service or age 50 with at	duty employees:	employees:
least 25 years of creditable service.	Same as Plan 1.	Not applicable.
		Defined Contribution Component:
		Members are eligible to receive
		distributions upon leaving employment,
		subject to restrictions.
		,
Earliest Reduced Retirement	Earliest Reduced Retirement	Earliest Reduced Retirement Eligibility
Eligibility	Eligibility	Defined Benefit Component:
VRS:	VRS:	VRS:
Age 55 with at least five years (60	Age 60 with at least five years (60	Age Members may retire with a reduced
months) of creditable service or age	months) of creditable service.	benefit as early as age 60 with at least five
50 with a least 10 years of creditable	Political subdivisions hazardous	years (60 months) of creditable service.
service.	duty employees:	Political subdivisions hazardous duty
Political subdivisions hazardous	Same as Plan 1.	employees:
duty employees:		Not applicable.
50 with at least five years of		Defined Contribution Component:
creditable service.		Members are eligible to receive
		distributions upon leaving employment,
		subject to restrictions.

NOTE 12. PENSION PLANS (VRS) (Continued)

PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
Cost-of-Living Adjustment (COLA)	Cost-of-Living Adjustment	Cost-of-Living Adjustment (COLA) in
in Retirement	(COLA) in Retirement	Retirement
The Cost-Living Adjustment (COLA)	The Cost-of-Living Adjustment	Defined Benefit Component:
matches the first 3% increase in the	(COLA) matches the first 2%	Same as Plan 2.
Consumer Price Index for all Urban	increase in the CPI-U and half of	Defined Contribution Component:
Consumers (CPI-U) and half of any	any additional increase (up to 2%),	Not applicable.
additional increase (up to 4%) up to a	for a maximum COLA of 3%.	Eligibility:
maximum COLA of 5%.	Eligibility:	Same as Plan 1 and Plan 2
Eligibility:	Same as Plan 1.	
For members who retire with a		
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		
calendar year following the retirement		
date.		
For members who retire with a		
reduced benefit and who have less		
than 20 years of creditable service,		
the COLA will go into effect on July		
1 after one calendar year following		
the unreduced retirement eligibility		
date.		
Exceptions to COLA Effective	Exceptions to COLA Effective	Exceptions to COLA Effective Dates:
Dates:	Dates:	Same as Plan 1 and Plan 2.
The COLA is effective July 1	Same as Plan 1.	
following one full calendar year		
(January 1 to December 31) under any		
of the following:		
• 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).		

#### NOTE 12. PENSION PLANS (VRS) (Continued)

PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
Exceptions to COLA Effective		
Date:		
(Continued)		
The member is involuntarily		
separated from employment for		
causes other than job performance or		
misconduct and is eligible to retire		
under the Workforce Transition Act		
or the Transitional Benefits Program.		
• The member dies in service and the		
member's survivor or beneficiary is		
eligible for a monthly death-in service		
benefit.		
The COLA will go into effect on July		
1 following one full calendar year		
(January 1 to December 31) from the		
date the monthly benefit begins.		
Disability Coverage	Disability Coverage	Disability Coverage
Members who are eligible to be	Members who are eligible to be	Employees of political subdivisions
considered for disability retirement	considered for disability retirement	(including Plan 1 and Plan 2 opt-ins)
and retire on disability, the retirement	and retire on disability, the	participate in the Virginia Local Disability
multiplier is 1.7% on all service,	retirement multiplier is 1.65% on	Program (VLDP) unless their local
regardless of when it was earned,	all service, regardless of when it	governing body provides and employer-
purchased or granted.	was earned, purchased or granted.	paid comparable program for its members.
VSDP members are subject to a one-	•	Hybrid members (including Plan 1 and
year waiting period before becoming	year waiting period before	Plan 2 opt-ins) covered under VLDP are
eligible for non-work-related	becoming eligible for non-work-	subject to a one-year waiting period before
disability benefits.	related disability benefits.	become eligible for non-work-related
		disability benefits.

#### NOTE 12. PENSION PLANS (VRS) (Continued)

Purchase of Prior Service	Purchase of Prior Service	Purchase of Prior Service	
Members may be eligible to purchase	Same as Plan 1.	Defined Benefit Component:	
service from previous public		Same as Plan 1, with the following	
employment, active duty military		exceptions:	
service, an eligible period of leave or		Hybrid Retirement Plan members are	
VRS refunded service as creditable		ineligible for ported service.	
service in their plan. Prior creditable		The cost for purchasing refunded service	
service counts toward vesting,		is the higher of 4% of creditable	
eligibility for retirement and the		compensation or average final	
health insurance credit. Only active		compensation.	
members are eligible to purchase		Plan members have one year from their	
prior service. When buying service,		date of hire or return from leave to	
members must purchase their most		purchase all but refunded prior service at	
recent period of service first.		approximate normal cost. After that one	
Members also may be eligible to		year period, the rate for most categories of	
purchase periods of leave without		service will change to actuarial cost.	
pay.		<b>Defined Contribution Component:</b>	
		Not applicable.	

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

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

Inactive members or their beneficiaries currently receiving benefits	<u>25</u>
Inactive members:	
Vested inactive members	10
Non-vested inactive members	10
Inactive members active elsewhere in VRS	9
Total inactive members	29
Active members	49
Total covered employees	103

#### **Contributions**

The contribution requirement for active employees is governed by §51.1-145 of the *Code of Virginia*, as amended, but may be impacted as a result of funding options provided to political subdivisions by the Virginia General Assembly. Employees are required to contribute 5.00% of their compensation toward their retirement.

#### NOTE 12. PENSION PLANS (VRS) (Continued)

#### **Contributions (Continued)**

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% member contribution. This could be phased in over a period of up to 5 years and the employer is required to provide a salary increase equal to the amount of the increase in the employee-paid member contribution.

The political subdivision's contractually required contribution rate for the year ended June 30, 2017 was 8.76 % 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 cost of benefits earned by employee during the year, with an additional amount to finance any unfunded accrued liability. Contribution to the pension plan from the political subdivision were \$162,933 and \$163,397 for the years ended June 30, 2018 and June 30, 2017, respectively.

#### **Net Pension Liability**

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

#### **Actuarial Assumptions - General Employees**

The total pension liability for General Employees in the Political Subdivision's Retirement Plan was based on an actuarial valuation as of June 30, 2015, 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, 2016.

#### NOTE 12. PENSION PLANS (VRS) (Continued)

#### **Actuarial Assumptions - General Employees (Continued)**

Inflation 2.5% (Plan 1); 2.25% (Plan 2 & Hybrid)

Salary increases, including Inflation 3.5 % - 5.35%

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

inflation\*

\* Administrative expenses as a percent of the market value of assets for the last experience study were found to be approximately 0.06% of the market assets for all of the VRS plans. This would provide an assumed investment 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: 14% of deaths are assumed to be service related

#### Largest 10 - Non-LEOS:

#### Pre-Retirement:

RP-2000 Employee Mortality Table Projected with Scale AA to 2020 with males set forward 4 years and females were set back 2 years.

#### Post-Retirement

RP-2000 Combined Mortality Table Projected with Scale AA to 2020 with males set forward 1 year.

#### Post-Disablement:

RP-2000 Disability Life Mortality Table Projected to 2020 with males set back 3 years and no provision for future mortality improvement.

#### All Others (Non 10 Largest) - Non-LEOS:

#### Pre-Retirement:

RP-2000 Employee Mortality Table Projected with Scale AA to 2020 with males set forward 4 years and females were set back 2 years.

#### Post-Retirement

RP-2000 Combined Mortality Table Projected with Scale AA to 2020 with males set forward 1 year.

#### Post-Disablement:

RP-2000 Disability Life Mortality Table Projected to 2020 with males set back 3 years and no provision for future mortality improvement.

#### NOTE 12. PENSION PLANS (VRS) (Continued)

The actuarial assumptions used in the June 30, 2015 valuation were based on the results of an actuarial experience study for the period from July 1, 2008 through June 30, 2012. Changes to the actuarial assumptions as a result of the experience study are as follows:

#### Largest 10 - Non-LEOS:

- Update mortality rate
- Decrease in rates of service retirement
- Decrease in rates of disability retirement
  - Reduce rates of salary increase by 0.25% per year

#### All Others (Non 10 Largest) - Non-LEOS:

- Update mortality rate
- Decrease in rates of service retirement
- Decrease in rates of disability retirement
- Reduce rates of salary increase by 0.25% per year

#### Long-Term Expected Rate of Return

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

		Arithmetic Long-Term	Weighted Avg Long-Term
Asset Class ( Strategy)	Target Allocation	Expected Rate of Return	Expected Rate of Return
U. S Equity	19.50%	6.46%	1.26%
Developed Non U. S Equity	16.50%	6.28%	1.04%
Emerging Market Equity	6.00%	10.00%	0.60%
Fixed Income	15.00%	0.09%	0.01%
Emerging Debt	3.00%	3.51%	0.11%
Rate Sensitive Credit	4.50%	3.51%	0.16%
Non Rate Sensitive Credit	4.50%	5.00%	0.23%
Convertibles	3.00%	4.81%	0.14%
Public Real Estate	2.25%	6.12%	0.14%
Private Real Estate	12.75%	7.10%	0.91%
Private Equity	12.00%	10.41%	1.25%
Cash	1.00%	-1.50%_	-0.02%
Total	100.00%		5.83%
	Inflation	_	2.50%
	* Expected arithme	tic nominal return	8.33%

#### NOTE 12. PENSION PLANS (VRS) (Continued)

\*Using stochastic projection results provides an expected range of real rates of return over various time horizons. Looking at one year results produces an expected real return of 8.33% but also has a high standard deviation, which means there is high volatility. Over larger time horizons the volatility declines significantly and provides a median return of 7.44%, 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, 2018, the rate contributed by the employer for the Political Subdivision Retirement Plan will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly. From July 1, 2018 on, participating employers are assumed to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore the Long-term expected rate of return was applied to all periods of projected benefit payments to determine the total pension liability.

#### Changes in Net Pension Liability

	Increase (Decrease)					
	Total l	Pension Liability (a)		Plan Fiduciary Net Position (b)		Total Pension Liability (a) - (b)
Balance at June 30, 2016	\$	6,025,351	\$	4,459,560	3	1,565,791
Change for the year:						
Service Cost		187,256		-		187,256
Interest		411,687		-		411,687
Changes in assumptions		(110,235)				(110,235)
Differences between expected		(222 524)				(220, (04)
and actual experience		(239,604)		-		(239,604)
Contributions - employer		-		163,367		(163,367)
Contributions - employee		-		93,009		(93,009)
Net investment income		-		544,101		(544,101)
Benefit payments, including		(200 221)		(200 221)		
refunds of employee contributions		(288,221)		(288,221)		~ · · · ·
Administrative expenses		-		(3,111)		3,111
Other changes	,			(486)	_	486
Net changes		(39,117)		508,659		(547,776)
Balance at June 30, 2017	\$	5,986,234	\$	4,968,219	9	1,018,015

#### NOTE 12. PENSION PLANS (VRS) (Continued)

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

The following present the net pension liability of the political subdivision using the discount rate of 7.00%, as well as what the political subdivision's net pension liability would be if it were calculated using the discount rate that is one percentage point lower (6.00%) or on percentage point higher (8.00%) than the current rate:

	1	1% Decrease (6%)		Current Discount Rate (7%)		% Increase (8%)
Political subdivision's						
Net Pension Liability	\$	1,872,430	\$	1,018,015	\$	318,843

For the year ended June 30, 2017, the political subdivision recognized pension expense of \$42,283. At June 30, 2017, the political subdivision reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

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

		red Outflows of Resources	 red Inflows of Resources
Differences between expected and actual	**		
experience	\$	₩.	\$ 239,913
Change in assumptions		-	84,539
Net difference between projected and actual earnings on plan investments			73,277
Employer contributions subsequent to the			
measurement date	***************************************	162,933	 -
Total	\$	162,933	\$ 397,729

\$162,933 reported as deferred outflows of resources related to pensions resulting from the Commission's contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the year ended June 30, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year ended June 30	
2019	\$ (156,321)
2020	\$ (84,447)
2021	\$ (86,678)
2022	\$ (70,283)
Thereafter	\$ ₩

### APPALACHIAN JUVENILE COMMISSION REQUIRED SUPPLEMENTARY INFORMATION

For the Year Ended June 30, 2018

#### Schedule of Changes in the Commission's Net HIC OPEB Liability and Related Ratios

Benchme of Changes in the Commission of No. 2220 03 22 21101117, unit 2220	 2017
Service Cost Interest	\$ 2,365 7,448
Changes of benefit terms	-
Differences between expected and actual experience	-
Changes in assumptions	(2,943)
Benefit Payments	(7,691)
Net change in total HIC OPEB liability	(821)
Total HIC OPEB liability - beginning	 110,243
Total HIC OPEB liability - ending (a)	\$ 109,422
Plan fiduciary net position	
Contributions- Employer	\$ 7,625
Net investment income	2,536
Benefit Payments	(7,691)
Administrative expense	(42)
Other	129
Net change in plan fiduciary net position	2,557
Plan fiduciary net position - beginning	 21,977
Plan fiduciary net position - ending (b)	\$ 24,534
Political subdivision's net HIC OPEB liability - ending (a) - (b)	\$ 84,888
Plan fiduciary net position as a percentage of the total HIC OPEB liability	28.90%
Covered payroll	\$ 1,881,048
Political subdivision's net HIC OPEB liability as a percentage of covered payroll	4.51%

#### Schedule of Employer HIC Contributions

For the Years Ended 2018 and 2017

	Re	tractually equired tributions	in R	ributions elation to tractually		bution iency ess)	E	mployer's Covered Payroll	Contributions as a % of Covered Payroll
Date		(1)		(2)	(3	3)		(4)	(5)
2018	\$	7,653	\$	7,653	\$	-	\$	1,913,191	0.40%
2017	\$	7,625	\$	7,625	\$	-	\$	1,881,048	0.41%

#### For Reference Only:

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

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

### APPALACHIAN JUVENILE COMMISSION NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

For the Year Ended June 30, 2018

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

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

#### Largest Ten Locality Employers - General Employees

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

#### Non-Largest Ten Locality Employers - General 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 retirement rates at older ages and extended final retirement age from 70 to 75.
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Lowered disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 14 to 15%

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

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

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

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

### REQUIRED SUPPLEMENTARY INFORMATION For the Year Ended June 30, 2018

#### APPALACHIAN JUVENILE COMMISSION

### Notes to Required Supplementary Information For the Year Ended June 30, 2018

Schedule of Employer's Share of Net OPEB Liability Group Life For the Year Ended June 30, 2018*	Insurance Progi	'am
Por the Tear Ended Gane 50, 2016		2018
Employer's Proportion of the Net GLI OPEB Liability (Asset)		0.01033%
Employer's Proportionate Share of the Net GLI OPEB Liability (Asset)	\$	155,450
Employer's Covered Payroll	\$	1,903,550
Employer's Proportionate Share of the Net GLI OPEB Liability (Asset) as a Percentage Covered Payroll	of its	8.1663%
Plan Fiduciary Net Position as a Percentage of the Total GLI OPEB Liability		48.86%

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

### Schedule of Employer GLI Contributions For the Years Ended June 30, 2016 through 2018

Date	Red Conti	Contractually Required Contribution		Contributions in Relation to Contractually Required		Contribution Deficiency (Excess)_		mployer's Covered Payroll	Contributions as a% of Covered Payroll
	(1)								
2018	\$	9,949	\$	9,949	\$	-	•	\$ 1,913,191	0.5200%
2017	\$	9,912	\$	9,912	\$	-		\$ 1,881,048	0.5269%
2016	\$	9,196	\$	9,196	\$			\$ 1,886,751	0.4874%

#### For Reference Only:

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

Column 2 – Actual employer contribution remitted to VRS

 $Column\ 4-Employer's\ covered\ payroll\ amount\ for\ the\ fiscal\ year.$ 

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

#### APPALACHIAN JUVENILE COMMISSION Notes to Required Supplementary Information For the Year Ended June 30, 2018

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

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

Leachers	
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

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

#### APPALACHIAN JUVENILE COMMISSION

#### Notes to Required Supplementary Information For the Year Ended June 30, 2018

VaLORS Employees	Va	LO	RS	Emr	olovees	ç
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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%

JRS Employees

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

Largest Ten Locality Employers - General 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 retirement rates at older ages and extended final retirement age from 70 to 75  Adjusted fermination rates to better tit experience at each age and service
Withdrawal Rates	year
Disability Rates	Lowered disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 14% to 20%

Non-Largest Ten Locality Employers - General Employees

Mortality Rates (Pre-retirement, post- 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	year
Disability Rates	Lowered disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 14 to 15%

#### APPALACHIAN JUVENILE COMMISSION

#### Notes to Required Supplementary Information For the Year Ended June 30, 2018

Largest Ten Locality Employers - Hazardous Duty 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 retirement rates at older ages
	Adjusted termination rates to better fit experience at each age and service
Withdrawal Rates	year
Disability Rates	Increased disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 60% to 70%

Non-Largest Ten Locality Employers - Hazardous Duty Employees

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

### APPALACHIAN JUVENILE COMMISSION REQUIRED SUPPLEMENTARY INFORMATION

#### Schedule of Changes in the Net Pension Liability and Related Ratios

		June 30, 2017		June 30, 2016	Jι	ine 30, 2015
Total pension liability		•				
Service Cost	\$	187,256	\$	184,496	\$	185,069
Interest		411,687		391,804		378,373
Changes of benefit terms		-		-		-
Changes in assumptions		(110,235)		-		-
Differences between expected and actual						
experience		(239,604)		(22,813)		(121,020)
Benefit Payments, including refunds of employee contributions		(200.221)		(250 (65)		(250 422)
		(288,221)	_	(250,665)		(250,433)
Net change in total pension liability		(39,117)		302,822		191,989
Total pension liability - beginning	,	6,025,351		5,722,529	_	5,530,540
Total pension liability - Ending (a)	\$	5,986,234	<u>\$</u>	6,025,351	<u>\$</u>	5,722,529
Plan fiduciary net position						
Contributions - employer	\$	163,367	\$	191,698	\$	189,972
Contributions -employee		93,009		94,566		94,008
Net investment income		544,101		78,225		191,524
Benefit Payments, including refunds of employee contributions		(288,221)		(250,665)		(250,443)
Administrative expense		(3,111)		(2,667)		(2,545)
Other		(486)		(33)		(41)
Net change in plan fiduciary net position		508,659	-	111,124		222,475
Plan fiduciary net position - beginning		4,459,560		4,348,436		4,125,951
•	\$	4,968,219	\$	4,459,560		4,348,426
Plan fiduciary net position - ending (b)	Ф	4,906,219	<u> </u>	4,439,300	<u>1</u>	4,340,420
Political subdivision's net pension liability						
ending (a) - (b)	\$	1,018,015	\$	1,565,791	\$	1,374,103
Plan fiduciary net position as a percentage						
of the total pension liability		82.99%		74.01%		75.99%
Garage and an all	¢r.	1.010.101	æ	1.003.550	rh.	1.012.010
Covered-employee payroll	\$	1,913,191	4	1,903,550	\$	1,915,010
Political subdivision's net pension liability						
as a percentage of covered-employer		53.21%		82.26%		71.72%

### APPALACHIAN JUVENILE COMMISSION REQUIRED SUPPLEMENTARY INFORMATION

	 	SCHE	DULE OF EM	PLOYE	R PENSION CO	NTR	IBUTIONS	
			For the Years	Ended Ju	me 30, 2015 thro	ough	2017	
	ontractually Required ontribution	Cont	outions in Relation to ractually Required Contributions	Contribut	on Deliciency (Excess)	En	ipløyer's Covered Employee Payroll	Contributions as a % of Covered Employee Payroll
Date	(1)		(2)		(3)		(4)	(5)
2018	\$ 195,649	\$	195,649	\$	-	\$	1,913,191	10.23%
2017	\$ 195,960	\$	195,960	\$	-	\$	1,903,550	10.29%
2016	\$ 191,728	\$	191,728	\$	-	\$	1,915,810	10,01%
2015	\$ 189,915	\$	189,915	\$	-	\$	1,892,396	10.04%
2014	\$ 237,739	\$	237,739	\$	-	\$	1,894,219	12.55%
2013	\$ 221,670	\$	221,670	\$	-	\$	1,774,328	12.49%
2012	\$ 228,672	\$	228,672	\$	-	\$	1,655,568	13.81%
2011	\$ 257,607	\$	257,607	\$	•	\$	1,829,736	14.08%
2010	\$ 254,500	\$	254,500	\$	-	\$	1,827,936	13.92%
2009	\$ 272,412	\$	272,412	\$	-	\$	1,932,605	14.10%
2008	\$ 288,921	\$	288,921	\$	-	\$	1,838,268	15.72%

#### Notes to Required Supplementary Information For the Year Ended June 30, 2017

Change 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 was a new benefit and the number of participants was relatively small, the impact on the liabilities as of the measurement date of June 30, 2016 are not material.

Changes of assumptions – The following changes in actuarial assumptions were made effective June 30, 2013 based on the most recent experience study of the System for the four-year period ending June 30, 2012:

#### Largest 10 - Non-LEOS:

- Update mortality rate
- Decrease in rates of service retirement
- Decrease in rates of disability retirement
- Reduce rates of salary increase by 0.25% per year

#### Largest 10 -LEOS:

- Update mortality rate
- Decrease in male rates of disability

#### All Others (Non 10 Largest) - Non-LEOS:

- Update mortality rate
- Decrease in rates of service retirement
- Decrease in rates of disability retirement
- Reduce rates of salary increase by 0.25% per year

#### All Others (Non 10 Largest) - LEOS:

- Update mortality rate
- Adjustments to rates of service retirement for females
- Increase in rates of withdrawal
- Decrease in male and female rates of disability

#### ACCOMPANYING INFORMATION

APPALACHIAN JUVENILE COMMISSION SCHEDULE OF SUPPORT AND REVENUE Year Ended June 30, 2018

				DRUG	
	BUDGET	SECURE	ALTERNATIVES	COURT	TOTAL
Local revenue Juvenile detention	\$ 2,422,800	\$ 1,912,982	\$ 632,552	\$ 75,000	\$ 2,620,534
State support and revenue Secure detention	815.000	854,429	ı	1	854,429
Non-secure detention	360,000		362,823	i	362,823
Drug Court			1	11,810	11,810
	1,175,000	854,429	362,823	11,810	1,229,062
Federal support					
E-Rate funds	20,000	1,512	3,725	1	5,237
USDA funds	40,000	34,261	ľ	1	34,261
Other grants and funding		4,050			4,050
	60,000	39,823	3,725	The state of the s	43,548
Fund Balance Transfer from localities	110,000	110,000	ı	1	110,000
Interest income	16,700	35,317	ı	•	35,317
Miscellaneous	33,200	11,506	1,095	25,000	37,601
	159,900	156,823	1,095	25,000	182,918
Total support and revenue	\$ 3,817,700	\$ 2,964,057	\$ 1,000,195	\$ 111,810	\$ 4,076,062

The accompanying notes are an integral part of these financial statements.

APPALACHIAN JUVENILE COMMISSION SCHEDULE OF REVENUE FROM JUVENILE DETENTION Year Ended June 30, 2018

	TOTAL	\$ 195,192	126,652	91,532	257,388	113,692	209,856	264,720	243,468	248,916	222,432	448,952	5,934	69,125	13,125	36,925	38,150	1,750	32,725	2,620,534	1	\$ 2,620,534
DRUG	COURT	- •	•	•	25,000	ı	ı	25,000	1	•	,	25,000	1	ı	1	1	i	ı		75,000	4.007 10007	\$ 75,000
•	ALTERNATIVES	\$ 52,589	34,123	24,661	62,610	30,631	56,540	64,586	965,59	67,064	59,928	114,224	ı	•	•	ı	ı	1		632,552	- Listerian	\$ 632,552
	SECURE	\$ 142,603	92,529	66,871	169,778	83,061	153,316	175,134	177,872	181,852	162,504	309,728	5,934	69,125	13,125	36,925	38,150	1,750	32,725	1,912,982	THE CONTRACTOR CONTRAC	\$ 1,912,982
		City of Bristol	Buchanan County	Dickenson County	Lee County	City of Norton	Russell County	Scott County	Smyth County	Tazewell County	Washington County	Wise County	Bristol VA Schools	Carroll County	Galax	Giles County	Grayson County	Henry County	Wythe County	Total localities	Commonwealth of Virginia	Total localities and state

The accompanying notes are an integral part of these financial statements.

APPALACHIAN JUVENILE COMMISSION SCHEDULE OF EXPENSES Year Ended June 30, 2018

Salaries and wages Payroll tax expense Employee health, dental insurance Employee disability and life Postemnloxment / retirement henefits (cain)	002 4 5 1 0	•		75 170				1 000 3
ts (oain)	2,134,500 177,500	\$ 1,525,816 111,219	• <del>•</del>	545,172 39,231	ჯა გ. დ.	43,004 \$ 3,334		2,115,992
ts (oain)	563,250	400,128		53,393	`∞`	,424	561	1,945
ts (gain)	11,500	7,727		2,868		239	10	0,834
(Time) 2:	202,750	55,883		53,756	4	,469	114	4,108
Workman's compensation insurance	23,100	16,600		5,743		448	22	2,791
	103,000	102,810		1			102	2,810
	16,500	15,820		1		•	71	5,820
	6,100	6,005		1			•	6,005
	9,200	9,187		•		1	٠,	9,187
	6,100	860'9		1		ı	•	860'9
	200	t		1				ı
	69,200	58,295		714			55	600,6
	47,050	30,613		14,521		1,328	4	6,462
	2,250	2,208		•		ı		2,208
	15,650	7,292		345		602	~	8,239
	6,000	5,190		1		ı	7,	5,190
	17,700	17,669		•		1	_	7,669
	149,500	8,301	-	27,035	9	6,463	4	1,799
	6,000	2,667				28		2,695
	2,300	2,205		1		i		2,205
Repairs and maintenance - equipment	22,400	17,747		4,679		ı	2.	2,426
	11,750	6,772		1,624		ı		8,396
	200	195		ı				195
	30,100	29,818	-			1	73	9,818
	850	099				•		099

# (Continued)

The accompanying notes are an integral part of these financial statements.

APPALACHIAN JUVENILE COMMISSION SCHEDULE OF EXPENSES Year Ended June 30, 2018

TOTAL	16,281	1	300	1	11,642	- 18,806	- 13,344	- 14,738	1	97,266	86 \$ 3,636,722
DRUG	15,306										\$ 83,786
ALTERNATIVES	975	E	•	1	1,839	ŧ	13,344	14,738	ı	2,292	\$ 982,269
SECURE	i	•	300	•	6,662	18,806	•		1	94,974	\$ 2,570,667
BUDGET	16,700	•	200	200	12,500	21,000	15,000	16,000	ı	101,150	\$ 3,817,700
	Program services	Mental health	Dues and professional membership	Security Supplies	Insurance expense	Repairs and maintenance-building	Office space rental	Electronic monitoring	Substance abuse testing	Depreciation	Total expenses

The accompanying notes are an integral part of these financial statements.

S. Douglas Blackley, CPA Charles P. Olinger, CPA Judy S. Olinger, CPA 601 Volunteer Parkway, Suite C Bristol, TN 37620 Telephone: (423) 989-3387 Fax: (423) 989-3830

## 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 Board of Directors Appalachian Juvenile Commission Bristol, Virginia

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of Appalachian Juvenile Commission, which comprise the statement of financial position as of June 30, 2018, and the related statement of activities, and cash flows for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated December 19, 2018.

#### **Internal Control over Financial Reporting**

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

Board of Directors Appalachian Juvenile Commission Page 2

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

As part of obtaining reasonable assurance about whether Appalachian Juvenile Commission's financial statements are free of 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

This 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 Commission'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 Commission's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Blackley, alinger & associates, PLAC

CERTIFIED PUBLIC ACCOUNTANTS

Bristol, Tennessee December 19, 2018