

VIRGINIA RETIREMENT SYSTEM LINE OF DUTY ACT PROGRAM

GASB No. 75 Schedules

With Independent Auditor's Report Thereon

For the Fiscal Year Ended June 30, 2017
With Select Comparative Information for the Fiscal Year Ended June 30, 2016

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Commonwealth of Virginia

Auditor of Public Accounts

P.O. Box 1295 Richmond, Virginia 23218

September 18, 2018

Board of Trustees Virginia Retirement System 1200 E. Main Street Richmond, VA 23219

INDEPENDENT AUDITOR'S REPORT

Report on the Schedules

We have audited the accompanying schedule of employer allocations of the Virginia Retirement System Line of Duty Act (LODA) Program, as of and for the years ended June 30, 2017, and June 30, 2016, and the related notes. We have also audited the total for all employers, of the columns titled net LODA OPEB liability as of and for the years ended June 30, 2017, and June 30, 2016, and total LODA OPEB expense as of and for the year ended June 30, 2017, included in the accompanying schedule of net LODA OPEB liability and total LODA OPEB expense of the Virginia Retirement System Line of Duty Act Program, and the related notes. In addition, we have audited the total for all employers of the columns titled total deferred outflows of resources and total deferred inflows of resources included in the accompanying schedule of deferred outflows and deferred inflows of resources by employer of the Virginia Retirement System Line of Duty Act Program, as of and for the year ended June 30, 2017, and the related notes.

Management's Responsibility for the Schedule

The Virginia Retirement System's management is responsible for the preparation and fair presentation of these schedules 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 the schedules that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on the schedule of employer allocations and the columns titled net LODA OPEB liability, total LODA OPEB expense, total deferred outflows of resources, and total deferred inflows of resources (specified column totals) included in the schedule of net LODA OPEB

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liability and total LODA OPEB expense and the schedule of deferred outflows and deferred inflows of resources by employer based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the schedule of employer allocations and specified column totals included in the schedule of net LODA OPEB liability and total LODA OPEB expense and the schedule of deferred outflows and deferred inflows of resources by employer are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the schedule of employer allocations and the specified column totals included in the schedule of net LODA OPEB liability and total LODA OPEB expense and the schedule of deferred outflows and deferred inflows of resources by employer. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the schedule of employer allocations and the specified column totals included in the schedule of net LODA OPEB liability and total LODA OPEB expense and the schedule of deferred outflows and deferred inflows of resources by employer, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the schedule of employer allocations and the specified column totals included in the schedule of net LODA OPEB liability and total LODA OPEB expense and the schedule of deferred outflows and deferred inflows of resources by employer in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by the Virginia Retirement System management, as well as evaluating the overall presentation of the schedule of employer allocations and the specified column totals included in the schedule of net OPEB LODA liability and total LODA OPEB expense and the schedule of deferred outflows and deferred inflows of resources by employer.

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

Opinions

In our opinion, the schedules referred to above present fairly, in all material respects, the employer allocations and the net LODA OPEB liability as of and for the years ended June 30, 2017, and June 30, 2016, and total deferred outflows of resources, total deferred inflows of resources, and total LODA OPEB expense as of and for the year ended June 30, 2017, for the total of all participating employers for the Virginia Retirement System Line of Duty Act Program in accordance with accounting principles generally accepted in the United States of America.

Other Matter

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in <u>Government Auditing Standards</u>, issued by the Comptroller General of the United States, the financial statements of the Virginia

Retirement System as of and for the year ended June 30, 2017, and our report thereon, dated December 15, 2017, expressed an unmodified opinion on those financial statements.

Restriction on Use

Our report is intended solely for the information and use of the Virginia Retirement System management, the Virginia Retirement System Board of Trustees, the Commonwealth Joint Legislative Audit and Review Commission, and Virginia Retirement System Line of Duty Act Program employers and their auditors, and is not intended to be and should not be used by anyone other than these specified parties.

Maythn S. Maysuelw AUDITOR OF PUBLIC ACCOUNTS

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Virginia Retirement System VRS Line of Duty Act Program (LODA) Schedule of Employer Allocations – Page 1 of 2 For the Fiscal Years Ended June 30, 2017 and 2016

			June 30,	2016	June 30, 2017			
				Employer			Employer	
Employe	1		Employer	Allocation	E	mployer	Allocation	
Code	Employer	Co	ntributions	Percentage	Co	ntributions	Percentage	
State:								
2XXXX	State Police Officers' Retirement System Employees		1,024,709	10.50255%		1,094,457	10.14770%	
3XXXX	All Other State Employees		954,767	9.76338%		1,032,693	9.57436%	
7XXXX	Virginia Law Officers' Retirement System Employees		3,877,291	39.73939%		4,441,940	41.18593%	
	Sub-total State	\$	5,856,767	60.00532%	\$	6,569,090	60.90799%	
Political S	Subdivisions:							
50001	Arlington County		418,315	4.28876%		442,123	4.09938%	
50005	Appalachia, Town of		2,594	0.02659%		2,269	0.02104%	
55113	Buchanan County		43,064	0.44137%		43,545	0.40376%	
55136	Gloucester County		80,031	0.82026%		86,807	0.80488%	
55139	Greene County		33,206	0.34033%		35,886	0.33274%	
55152	Lee County		45,269	0.46397%		50,354	0.46688%	
55167	Nottoway County		14,268	0.14624%		16,454	0.15256%	
55183	Russell County		47,993	0.49189%		54,041	0.50108%	
55197	Wise County		42,675	0.43738%		53,049	0.49187%	
55201	City of Bristol		89,370	0.91598%		98,013	0.90878%	
55213	City of Petersburg		130,229	1.33475%		142,835	1.32437%	
55214	City of Portsmouth		351,125	3.59878%		389,925	3.61539%	
55215	City of Radford		29,963	0.30710%		36,028	0.33405%	
55220	City of Suffolk		270,316	2.77054%		298,011	2.76316%	
55221	City of Williamsburg		38,913	0.39883%		42,978	0.39849%	
55222	City of Winchester		92,224	0.94523%		106,949	0.99164%	
55224	City of Falls Church		26,980	0.27652%		31,347	0.29065%	
55226	Front Royal, Town of		20,235	0.20739%		20,993	0.19464%	
55232	City of Franklin		33,465	0.34299%		35,177	0.32616%	
55233	City of Chesapeake		583,954	5.98644%		657,156	6.09451%	
55234	City of Virginia Beach		968,155	9.92558%		1,022,399	9.48107%	
55235	City of Norton		15,695	0.16086%		17,021	0.15782%	
55236	City of Manassas Park		30,093	0.30843%		33,475	0.31038%	
55238	Pound, Town of		2,075	0.02127%		4,255	0.03945%	
55245	Scottsville, Town of		1,557	0.01595%		1,702	0.01578%	
55249	Lacrosse, Town of		2,075	0.02127%		1,135	0.01052%	
55255	Brodnax, Town of		1,038	0.01063%		567	0.00526%	

Virginia Retirement System VRS Line of Duty Act Program (LODA) Schedule of Employer Allocations – Page 2 of 2 For the Fiscal Years Ended June 30, 2017 and 2016

		June 30, 2016			June 30, 2017		
			Employer			Employer	
Employer		Employer	Allocation		Employer	Allocation	
Code	Employer	Contributions	Percentage	Co	ntributions	Percentage	
55259	Richlands, Town of	27,499	0.28184%		28,369	0.26303%	
55300	Abington, Town of	12,971	0.13294%		14,752	0.13678%	
55301	Dumfries, Town of	4,151	0.04254%		5,674	0.05261%	
55304	South Boston, Town of	18,678	0.19144%		20,993	0.19464%	
55306	Remington, Town of	1,038	0.01063%		1,135	0.01052%	
55310	Smithfield, Town of	10,896	0.11167%		11,347	0.10521%	
55314	Jonesville, Town of	1,557	0.01595%		1,702	0.01578%	
55315	Wytheville, Town of	20,235	0.20739%		24,255	0.22489%	
55317	Vienna, Town of	21,143	0.21670%		22,553	0.20911%	
55321	Woodstock, Town of	8,301	0.08508%		9,078	0.08417%	
55327	Christiansburg, Town of	49,290	0.50518%		54,042	0.50108%	
55330	Chatham, Town of	1,557	0.01595%		1,702	0.01578%	
55332	City of Manassas	87,684	0.89870%		97,304	0.90221%	
55338	Quantico, Town of	1,946	0.01994%		1,986	0.01841%	
55354	Big Stone Gap, Town of	7,783	0.07977%		7,943	0.07365%	
55355	Luray, Town of	9,858	0.10104%		10,780	0.09995%	
55369	Tazewell, Town of	6,745	0.06913%		20,993	0.19464%	
55372	Weber City, Town of	2,594	0.02659%		2,837	0.02630%	
55374	Hurt Town of	1,557	0.01595%		1,702	0.01578%	
55375	Waverly, Town of	3,632	0.03723%		3,546	0.03288%	
55378	Courtland, Town of	1,038	0.01063%		1,135	0.01052%	
55380	Independence, Town of	2,594	0.02659%		3,972	0.03682%	
55382	Grundy, Town of	4,151	0.04254%		4,539	0.04208%	
55389	Pembroke, Town of	2,075	0.02127%		2,269	0.02104%	
55397	Orange, Town of	7,653	0.07844%		9,078	0.08417%	
55417	Norfolk Airport Authority	31,130	0.31907%		34,042	0.31564%	
55487	Capital Region Airport Commission	23,348	0.23930%		22,127	0.20517%	
55869	RSW Regional Jail	59,148	0.60622%		0	0.00000%	
55899	Shenandoah Valley Regional Airport Commission	8,820	0.09040%		9,645	0.08943%	
55922	Piedmont Regional Jail	47,733	0.48923%		61,843	0.57341%	
	Sub-total Political Subdivisions	\$ 3,901,677	39.99468%	\$	4,215,836	39.09201%	
Grand Tot	al	\$ 9,758,444	100.00000%	\$	10,784,926	100.00000%	

The accompanying notes are an integral part of the Schedule of Employer Allocations.

Virginia Retirement System VRS Line of Duty Act Program (LODA)

Schedule of Net LODA OPEB Liability and Total LODA OPEB Expense – Page 1 of 2 As of and For the Fiscal Years Ended June 30, 2017 and 2016

(Dollars in Thousands)

Employer		Net LODA OPEB Liability	Net LODA OPEB Liability	Total LODA OPEB Expense
Code	Employer	June 30, 2016	June 30, 2017	FY 2017
State:	<u> </u>	June 00, 2020	June 60, 2021	
2XXXX	State Police Officers' Retirement System Employees	29,237	26,677	2,261
3XXXX	All Other State Employees	27,176	25,161	2,148
7XXXX	Virginia Law Officers' Retirement System Employees	110,612	108,226	9,925
	Sub-total State	\$ 167,025	\$ 160,064	\$ 14,334
Political S	Subdivisions:			
50001	Arlington County	11,938	10,773	887
50005	Appalachia, Town of	74	55	3
55113	Buchanan County	1,229	1,061	81
55136	Gloucester County	2,283	2,115	181
55139	Greene County	947	874	75
55152	Lee County	1,291	1,227	109
55167	Nottoway County	407	401	37
55183	Russell County	1,369	1,317	119
55197	Wise County	1,217	1,293	130
55201	City of Bristol	2,550	2,389	208
55213	City of Petersburg	3,715	3,480	302
55214	City of Portsmouth	10,017	9,501	839
55215	City of Radford	855	877	85
55220	City of Suffolk	7,712	7,261	635
55221	City of Williamsburg	1,110	1,047	91
55222	City of Winchester	2,631	2,606	243
55224	City of Falls Church	770	764	71
55226	Front Royal, Town of	577	511	41
55232	City of Franklin	955	857	70
55233	City of Chesapeake	16,663	16,016	1,438
55234	City of Virginia Beach	27,627	24,916	2,050
55235	City of Norton	448	415	35
55236	City of Manassas Park	859	815	73
55238	Pound, Town of	59	104	15
55245	Scottsville, Town of	44	41	4
55249	Lacrosse, Town of	59	28	(1)
55255	Brodnax, Town of	30	14	(1)

Virginia Retirement System VRS Line of Duty Act Program (LODA)

Schedule of Net LODA OPEB Liability and Total LODA OPEB Expense – Page 2 of 2 As of and For the Fiscal Years Ended June 30, 2017 and 2016

(Dollars in Thousands)

			Net	Net			Total
			A OPEB	LODA OP			OA OPEB
Employer			ability	Liability	-		pense
Code	Employer Diablands Town of	June	30, 2016	June 30, 2		<u> </u>	Y 2017
55259	Richlands, Town of		784 370		691		55 33
55300 55301	Abington, Town of Dumfries, Town of		118		359 138		33 15
55304	South Boston, Town of		533		511		15 46
55304	Remington, Town of		30		28		2
55310	Smithfield, Town of		311		276		22
55314	Jonesville, Town of		44		41		4
55315	Wytheville, Town of		577		591		57
55317	Vienna, Town of		603		550		46
55321	Woodstock, Town of		237		221		16
55327	Christiansburg, Town of		1,406	1	,317		115
55330	Chatham, Town of		44		41		4
55332	City of Manassas		2,501	2	,371		209
55338	Quantico, Town of		56		48		-
55354	Big Stone Gap, Town of		222		193		15
55355	Luray, Town of		281		263		20
55369	Tazewell, Town of		192		511		83
55372	Weber City, Town of		74		69		5
55374	Hurt Town of		44		41		4
55375	Waverly, Town of		104		87		7
55378	Courtland, Town of		30		28		2
55380	Independence, Town of		74		97		11
55382	Grundy, Town of		118		111		9
55389	Pembroke, Town of		59		55		4
55397	Orange, Town of		218		221		21
55417	Norfolk Airport Authority		888		829		72
55487	Capital Region Airport Commission		666		539		37
55869	RSW Regional Jail		1,687		-		(185)
55899	Shenandoah Valley Regional Airport Commission		252		235		18
55922	Piedmont Regional Jail		1,362		,507		158
	Sub-total Political Subdivisions	\$	111,321		,727	\$	8,725
Grand Tot	ral	\$	278,346	\$ 262	,791	\$	23,059

The accompanying notes are an integral part of the Schedule of Net LODA OPEB Liability and Total LODA OPEB Expense.

Virginia Retirement System VRS Line of Duty Act Program (LODA)

Schedule of Deferred Outflows and Deferred Inflows of Resources by Employer – Page 1 of 2 As of June 30, 2017

(Dollars in Thousands)

			Deferred Outflows of Resources			Deferred Inflows of Resources						
			Net					Net				
			Difference					Difference				
		D:11	Between			-	D:11	Between			-	
		Differences	Projected			Total	Differences	Projected			Total	
		Between	and Actual			Deferred	Between	and Actual			Deferred	
Fmalouer		Expected and Actual	Earnings on OPEB Plan	Change of	Changes In Proportionate	Outflows of	Expected and Actual	Earnings on OPEB Plan	Change of	Changes In	Inflows of	
Employer Code	Employee			Change of	Share		Experience		Change of	Proportionate Share		
State:	Employer	Experience	Investments	Assumptions	Sildle	Resources	Experience	Investments	Assumptions	Stidie	Resources	
2XXXX	State Police Officers' Retirement System Employees	_	_	_	_	_	_	55	2,748	915	3,718	
3XXXX	All Other State Employees	_	_	_	298	298	_	43	2,600	766	3,409	
7XXXX	Virginia Law Officers' Retirement System Employees	_	_	_	4,934	4,934	_	176	11,182	1,332	12,690	
77000	Sub-total State	\$ -	\$ -	\$ -		\$ 5,232	\$ -	\$ 274				
Political Sub		<u> </u>	т	*	, 0,=0=	+	-		7 20,000 7	3,020	7 =5/5=:	
50001	Arlington County	_	_	-	-	_	-	18	1,113	469	1,600	
50005	Appalachia, Town of	_	-	-	-	-	-	-	6	13	19	
55113	Buchanan County	-	-	-	-	-	-	2	109	93	204	
55136	Gloucester County	-	-	-	=	-	-	4	218	38	260	
55139	Greene County	-	-	-	-	-	-	1	91	19	111	
55152	Lee County	-	-	-	7	7	-	2	127	-	129	
55167	Nottoway County	-	-	-	16	16	-	1	41	-	42	
55183	Russell County	-	-	-	23	23	-	2	136	-	138	
55197	Wise County	-	-	-	135	135	-	2	134	-	136	
55201	City of Bristol	-	-	-	-	-	-	4	247	18	269	
55213	City of Petersburg	-	-	-	-	-	-	6	359	26	391	
55214	City of Portsmouth	-	-	-	41	41	-	16	981	-	997	
55215	City of Radford	-	-	-	67	67	-	1	91	-	92	
55220	City of Suffolk	-	-	-	-	-	-	12	750	19	781	
55221	City of Williamsburg	-	-	-	-	-	-	2	108	-	110	
55222	City of Winchester	-	-	-	115	115	-	4	270	-	274	
55224	City of Falls Church	-	-	-	35	35	-	1	79	-	80	
55226	Front Royal, Town of	-	-	-	-	-	-	1	53	31	85	
55232	City of Franklin	-	-	-	-	-	-	1	89	42	132	
55233	City of Chesapeake	-	-	-	268	268	-	27	1,654	-	1,681	
55234	City of Virginia Beach	-	-	-	-	-	-	42	2,574	1,101	3,717	
55235	City of Norton	-	-	-	-	-	-	1	43	7	51	
55236	City of Manassas Park	-	-	-	4	4	-	1	85	-	86	
55238	Pound, Town of	-	-	-	45	45	-	-	11	-	11	
55245	Scottsville, Town of	-	-	-	-	-	-	-	4	-	4	
55249	Lacrosse, Town of	-	-	-	-		-	-	3	27	30	
55255	Brodnax, Town of	-	-	-	-		-	-	1	13	14	

Virginia Retirement System VRS Line of Duty Act Program (LODA)

Schedule of Deferred Outflows and Deferred Inflows of Resources by Employer – Page 2 of 2 As of June 30, 2017

			Deferred Outflows of Resources			Deferred Inflows of Resources						
			N	let					Net			
			Diffe	erence					Difference			
		Difference	es Proj	ween ected			Total Deferred	Differences	Between Projected and Actual			Total
		Betwee		Actual ings on		Changes In	Outflows	Between	Earnings on		Changes In	Deferred Inflows
Employer		Expecte and Actu		B Plan	Change of	Proportionate	of	Expected and Actual	OPEB Plan	Change of	Proportionate	of
Code	Employer	Experien		tments	Assumptions	Share	Resources	Experience	Investments	Assumptions	Share	Resources
55259	Richlands, Town of		-	-	-	-	-	-	1	72	46	119
55300	Abington, Town of		-	_	-	10	10	-	1	37	-	38
55301	Dumfries, Town of		_	_	-	25	25	-	-	15	-	15
55304	South Boston, Town of		_	_	-	8	8	-	1	53	-	54
55306	Remington, Town of		_	_	-	-	-	-	-	3	-	3
55310	Smithfield, Town of		_	-	-	-	-	-	-	29	16	45
55314	Jonesville, Town of		-	-	-	-	-	-	-	4	-	4
55315	Wytheville, Town of		-	-	-	44	44	-	1	61	-	62
55317	Vienna, Town of		-	-	-	-	-	-	1	57	19	77
55321	Woodstock, Town of		-	-	-	-	-	-	-	23	-	23
55327	Christiansburg, Town of		-	-	-	-	-	-	2	136	10	148
55330	Chatham, Town of		-	-	-	-	-	-	-	4	-	4
55332	City of Manassas		-	-	-	9	9	-	4	245	-	249
55338	Quantico, Town of		-	-	-	-	-	-	-	5	-	5
55354	Big Stone Gap, Town of		-	-	-	-	-	-	-	20	15	35
55355	Luray, Town of		-	-	-	-	-	-	-	28	-	28
55369	Tazewell, Town of		-	-	-	311	311	-	1	53	-	54
55372	Weber City, Town of		-	-	-	-	-	-	-	7	-	7
55374	Hurt Town of		-	-	-	-	-	-	-	4	-	4
55375	Waverly, Town of		-	-	-	-	-	-	-	9	11	20
55378	Courtland, Town of		-	-	-	-	-	-	-	3	-	3
55380	Independence, Town of		-	-	-	25	25	-	-	10	-	10
55382	Grundy, Town of		-	-	-	-	-	-	-	12	-	12
55389	Pembroke, Town of		-	-	-	-	-	-	-	6	-	6
55397	Orange, Town of		-	-	-	14	14	-	-	23	-	23
55417	Norfolk Airport Authority		-	-	-	-	-	-	1	86	9	96
55487	Capital Region Airport Commission		-	_	-	-	-	-	1	56	85	142
55869	RSW Regional Jail		-	-	-	-	-	-	-	-	1,502	1,502
55899	Shenandoah Valley Regional Airport Commission		-	_	-	-	-	-	-	25	-	25
55922	Piedmont Regional Jail		-	-	-	208	208	-	3	155	-	158
	Sub-total Political Subdivisions	\$	- \$	-	\$ -	\$ 1,410	1,410	\$ -	\$ 168		3,629	14,415
Grand Total		\$	- \$	-	\$ -	\$ 6,642	6,642	\$ -	\$ 442	\$ 27,148	6,642	34,232

The accompanying notes are an integral part of the Schedule of Deferred Outflows and Deferred Inflows of Resources by Employer.

Virginia Retirement System VRS Line of Duty Act Program (LODA) Notes to GASB No. 75 Schedules For the Fiscal Year Ended June 30, 2017 With Select Comparative Information for the Fiscal Year Ended June 30, 2016

Note 1. Summary of Significant Accounting Policies

Description of the Entity

The Virginia Retirement System (the System) is an independent agency of the Commonwealth of Virginia. The System administers four separate pension trust funds – the Virginia Retirement System (VRS), the State Police Officers' Retirement System (SPORS), the Virginia Law Officers' Retirement System (VaLORS), and the Judicial Retirement System (JRS) and several Other Post-Employment Benefit trust funds – the Group Life Insurance Program, the Retiree Health Insurance Credit Program, the Disability Insurance Program for state employees, the Line of Duty Act Program and the Virginia Local Disability Program for participating schools systems and local governments.

Administration and Management

The Board of Trustees (the Board) is responsible for the general administration and operation of the pension plans and the other employee benefit plans. The Board has full power to invest and reinvest the trust funds of the System through the adoption of investment policies and guidelines that fulfill the Board's investment objective to maximize long-term investment returns while targeting an acceptable level of risk.

The Board consists of nine members. Five members are appointed by the Governor and four members are appointed by the Joint Rules Committee of the General Assembly subject to confirmation by the General Assembly. The Board appoints a Director to serve as the Chief Administrative Officer of the System and a Chief Investment Officer to direct, manage, and administer the investment of the System's funds.

The System issues a Comprehensive Annual Financial Report (CAFR) containing the financial statements and required supplementary information for all of the System's pension and other employee benefit trust funds. The CAFR is publically available through the About VRS link on the VRS website at www.varetire.org, or a copy may be obtained by submitting a request to the VRS Chief Financial Officer, PO Box 2500, Richmond, VA 23218-2500. The pension and other employee benefit trust funds administered by the VRS are classified as fiduciary funds and are included in the basic financial statements of the Commonwealth of Virginia.

Other Post-Employment Benefits – Line of Duty Act Program (LODA)

The Virginia Retirement System (VRS) Line of Duty Act Program (LODA) is a multiple-employer, cost-sharing plan. The Line of Duty Act Program was established pursuant to §9.1-400 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 Line of Duty Act Program provides death and health insurance benefits to eligible state employees and local government employees, including volunteers, who die or become disabled as a result of the performance of their duties as a public safety officer. In addition, health insurance benefits are provided to eligible survivors and family members. For purposes of measuring the net LODA OPEB liability, deferred outflows of resources and deferred inflows of resources related to the LODA OPEB, and LODA OPEB expense, information about the fiduciary net position of the Virginia Retirement System (VRS) Line of Duty Act Program (LODA) and the additions to/deductions from the VRS Line of Duty Act 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.

Note 2. General Information about the LODA OPEB Plan

All paid employees and volunteers in hazardous duty positions in Virginia localities and hazardous duty employees who are covered under the Virginia Retirement System (VRS), the State Police Officers' Retirement System (SPORS), or the Virginia Law Officers' Retirement System (VaLORS) are automatically covered by the Line of Duty Act Program (LODA). As required by statute, the Virginia Retirement System (the System) is responsible for managing the assets of the program. Participating employers made contributions to the program beginning in FY 2012. The employer contributions are determined by the System's actuary using anticipated program costs and the number of covered individuals associated with all participating employers.

The specific information for Line of Duty Act (LODA) OPEB, including eligibility, coverage, and benefits is set out in the table below:

LINE OF DUTY ACT PROGRAM (LODA) PLAN PROVISIONS

Eligible Employees

The eligible employees of the Line of Duty Act Program (LODA) are paid employees and volunteers in hazardous duty positions in Virginia localities and hazardous duty employees who are covered under the Virginia Retirement System (VRS), the State Police Officers' Retirement System (SPORS), or the Virginia Law Officers' Retirement System (Valors).

Benefit Amounts

The Line of Duty Act Program (LODA) provides death and health insurance benefits for eligible individuals:

- <u>Death</u> The Line of Duty Act program death benefit is a one-time payment made to the beneficiary or beneficiaries of a covered individual. Amounts vary as follows:
 - \$100,000 when a death occurs as the direct or proximate result of performing duty as of January 1, 2006, or after.
 - o \$25,000 when the cause of death is attributed to one of the applicable presumptions and occurred earlier than five years after the retirement date.

- An additional \$20,000 benefit is payable when certain members of the National Guard and U.S. military reserves are killed in action in any armed conflict on or after October 7, 2001.
- Health Insurance The Line of Duty Act program provides health insurance benefits.
 - Prior to July 1, 2017, these benefits were managed through the various employer plans and maintained the benefits that existed prior to the employee's death or disability. These premiums were reimbursed to the employer by the LODA program.
 - O Beginning July 1, 2017, the health insurance benefits are managed through the Virginia Department of Human Resource Management (DHRM). The health benefits are modeled after the State Employee Health benefits Program plans and provide consistent, premium-free continued health plan coverage for LODAeligible disabled individuals, survivors and family members. Individuals receiving the health insurance benefits must continue to meet eligibility requirements as defined by the Line of Duty Act.

Contributions

The contribution requirements for the Line of Duty Act Program (LODA) are governed by §9.1-400.1 of the *Code of Virginia*, as amended, but may be impacted as a result of funding provided to state agencies by the Virginia General Assembly. Each employer's contractually required employer contribution rate for the Line of Duty Act Program (LODA) for the year ended June 30, 2018 was \$567.37 per covered full-time-equivalent employee. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2015 and represents the pay-as-you-go funding rate and not the full actuarial cost of the benefits under the program. The actuarially determined pay-as-you-go rate was expected to finance the costs and related expenses of benefits payable during the year.

Actuarial Assumptions and Methods

The total Line of Duty Act Program (LODA) 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	2.50 percent
Salary increases, including inflation – General state employees SPORS employees VaLORS employees Locality employees	3.50 percent – 5.35 percent 3.50 percent – 4.75 percent 3.50 percent – 4.75 percent 3.50 percent – 4.75 percent
Medical cost trend rates assumption – Under age 65 Ages 65 and older	7.75 percent – 5.00 percent 5.75 percent – 5.00 percent

* 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 3.56%. However, since the difference was minimal, a more conservative 3.56% investment return assumption has been used. Since LODA is funded on a current-disbursement basis, the assumed annual rate of return of 3.56% was used since it approximates the risk-free rate of return.

Mortality rates – General State Employees

Pre-Retirement:

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

Post-Retirement:

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

Post-Disablement:

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

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

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

Mortality rates - SPORS Employees

Pre-Retirement:

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

Post-Retirement:

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

Post-Disablement:

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

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

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

Mortality rates - VaLORS Employees

Pre-Retirement:

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

Post-Retirement:

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

Post-Disablement:

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

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

Mortality Rates (Pre-retirement, post-	Updated to a more current mortality table – RP-2014
retirement healthy, and disabled)	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 – Largest Ten Locality Employers With Public Safety 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-	Updated to a more current mortality table – RP-2014
retirement healthy, and disabled)	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 With Public Safety 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-	Updated to a more current mortality table – RP-2014
retirement healthy, and disabled)	projected to 2020
Retirement Rates	Increased age 50 rates and lowered rates at older ages
Withdrawal Rates	Adjusted rates to better fit experience at each 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%

Changes to the LODA Program Associated with HB 1345 (2016) and HB 2243 (2017)

The following changes were made to the LODA Program as a result of legislation in 2016 and 2017, but were specifically not considered in the June 30, 2016 actuarial valuation results which were rolled forward to the measurement date of June 30, 2017. There was no current actuarial experience on which to base the adjustments and the combined impact of the changes was not considered to be material to the final results. These changes will be factored into future actuarial valuations for the LODA Program.

- The discontinuance of spouse health care coverage, if a covered spouse divorces a disabled employee or a covered surviving spouse remarries.
- The potential for VRS's periodic review of the disability status of a disabled employee.
- For those beneficiaries who become eligible for health care benefits as the result of a disability occurring after June 30, 2017, the suspension of health care benefits in years when VRS certifies current income exceeds salary at the time of the disability, indexed for inflation.
- The extension of health care benefits for dependent children to age 26.
- The expansion of the definition of presumption of death or disability to include infectious diseases.

Note 3. Net Line of Duty Act Program (LODA) OPEB liability

The net OPEB liability (NOL) for the Line of Duty Act Program (LODA) represents the total Line of Duty Act Program's (LODA) OPEB liability determined in accordance with GASB Statement No. 74, less its fiduciary net position. As of June 30, 2017, NOL amounts for the VRS Line of Duty Act Program's (LODA) OPEB liability are as follows (amounts expressed in thousands):

Total LODA OPEB Liability
Plan Fiduciary Net Position
LODA Net OPEB Liability (Asset)

\$ 266,252

3,461

<u>\$ 262,791</u>

The total LODA 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 LODA 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.

Discount Rate

The discount rate used to measure the total LODA OPEB liability was 3.56%. The projection of cash flows used to determine the discount rate assumed that employer contributions will be made per the VRS Statutes and that they will be made in accordance with the VRS funding policy and at rates equal to the actuarially determined contribution rates adopted by the VRS Board of Trustees. Through the fiscal year ending June 30, 2019, the rate contributed by participating employers to the LODA OPEB Program will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly.

Long-Term Expected Rate of Return

The long-term expected rate of return on LODA OPEB Program's investments was set at 3.56% for this valuation. Since LODA is funded on a current-disbursement basis, it is not able to use the VRS Pooled Investments 7.00% assumption. Instead, the assumed annual rate of return of 3.56% was used since it approximates the risk-free rate of return. This Single Equivalent Interest Rate (SEIR) is the applicable municipal bond index rate based on the Bond Buyer General Obligation 20-year Municipal Bond Index published monthly by the Board of Governors of the Federal Reserve System as of the measurement date of June 30, 2017.

Sensitivity Analysis – Investment Rate of Return

The following table presents the collective net Line of Duty Act Program (LODA) liability of the participating employers in the VRS Line of Duty Act Program (LODA) using the discount rate of 3.56%, as well as what the collective net Line of Duty Act Program (LODA) liability of the participating employers would be if it were calculated using a discount rate that is one percentage point lower (2.56%) or one percentage point higher (4.56%) than the current rate (amounts expressed in thousands):

Net LODA OPEB Liability - 1.00% Decrease (2.56%)	\$ 297,986
Net LODA OPEB Liability - Current Discount Rate (3.56%)	\$ 262,791
Net LODA OPEB Liability - 1.00% Increase (4.56%)	\$ 233,356

Sensitivity Analysis – Health Care Trend Rate

The following table presents the collective net Line of Duty Act Program (LODA) liability of the participating employers in the VRS Line of Duty Act Program (LODA) using the Healthcare Cost Trend rate of 7.75% decreasing to 5.00%, as well as what the collective net Line of Duty Act Program (LODA)

liability of the participating employers would be if it were calculated using a Healthcare Cost Trend rate that is one percentage point lower (6.75% decreasing to 4.00%) or one percentage point higher (8.75% decreasing to 6.00%) than the current rate (amounts expressed in thousands):

Net LODA OPEB Liability - 1.00% Decrease (6.75% decreasing to 4.00%)	\$ 222,981
Net LODA OPEB Liability - Current Discount Rate (7.75% decreasing to 5.00%)	\$ 262,791
Net LODA OPEB Liability - 1.00% Increase (8.75% decreasing to 6.00%)	\$ 312.133

Note 4. Deferred Outflows / (Inflows) of Resources

The following schedule reflects the amortization of the net balance of remaining deferred outflows / (inflows) of resources at June 30, 2017. The average remaining service lives of all employees provided with benefits through the VRS Line of Duty Act Program (LODA) at June 30, 2017 was 9.10 years. Deferred outflows of resources related to the Line of Duty Act Program (LODA) resulting from contributions subsequent to the measurement date will be recognized as a reduction of the Net LODA OPEB Liability in the financial statements for the year ended June 30, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the Line of Duty Act Program (LODA) will be recognized in the Line of Duty Act Program (LODA) expense as follows (amounts expressed in thousands):

Measurement Period Ending June 30, 2018	(\$ 3,462)
Measurement Period Ending June 30, 2019	(\$ 3,462)
Measurement Period Ending June 30, 2020	(\$ 3,462)
Measurement Period Ending June 30, 2021	(\$ 3,464)
Measurement Period Ending June 30, 2022	(\$ 3,352)
Thereafter	(\$ 10,388)

Note 5. Employer Contributions

Employers' proportionate shares were calculated on the basis of historical employer contributions. Although GASB Statement No. 75 encourages the use of the employer's projected long-term contribution effort to the Other Post-Employment Benefit plan, allocating on the basis of historical employer contributions is considered acceptable. Employer contributions recognized by the VRS Line of Duty Act Program (LODA) that are not representative of future contribution effort are excluded in the determination of employers' proportionate shares. Examples of employer contributions not representative of future contribution effort are contributions for adjustments for prior periods.

The employer contributions used in the determination of employers' proportionate shares of collective Other Post-Employment Benefit amounts reported in the Schedule of Employer Allocations was based on the total employer contributions using the plan's contribution rates and the employer's covered participants for FY 2017. This total was \$10,784,926. The employer contributions of \$11,024,000 reported in the VRS Line of Duty Act Program (LODA) Program's Statement of Changes in Net Position (per the System's separately issued financial statements) reflects the calculated amount less

approximately \$239,074 in other employer contributions and adjustments that were not representative of future contribution efforts.

Note 6. Additional Financial and Actuarial Information

Information contained in the VRS Line of Duty Act Program (LODA) OPEB Notes to the Schedule of Employer Allocations and Schedule of Line of Duty Act Program (LODA) OPEB Amounts by Employer (Schedules) was extracted from the audited financial statements of the Virginia Retirement System for the fiscal year ended June 30, 2017. Additional financial information supporting the preparation of the VRS Line of Duty Act Program (LODA) OPEB Schedules (including the unmodified audit opinion on the financial statements and required supplementary information) is presented in the separately issued VRS 2017 Comprehensive Annual Financial Report (CAFR). A copy of the 2017 VRS CAFR is publicly available through the About VRS link on the VRS website at www.varetire.org, or a copy may be obtained by submitting a request to the VRS Chief Financial Officer, PO Box 2500, Richmond, VA 23218-2500.