



Virginia
Retirement
System

**VIRGINIA RETIREMENT SYSTEM
TEACHER RETIREMENT PLAN**

GASB No. 68 Schedules

With Independent Auditor's Report Thereon

For the Plan Year Ended June 30, 2019

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P.O. Box 1295
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July 28, 2020

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 Teacher Retirement Plan as of and for the year ended June 30, 2019, and the related notes. We have also audited the total for teacher employers of the columns titled net pension liability, total pension expense, total deferred outflows of resources, and total deferred inflows of resources (specified column totals) included in the accompanying schedule of net pension liability and total pension expense and the schedule of deferred outflows and deferred inflows of resources by employer of the Virginia Retirement System Teacher Retirement Plan as of and for the year ended June 30, 2019, and the related notes.

Management's Responsibility for the Schedules

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 specified column totals included in the schedule of net pension liability and total pension 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 the specified column totals included in the schedule of net pension liability and total pension 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

pension liability and total pension 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 pension liability and total pension 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 pension liability and total pension 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 pension liability and total pension 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 net pension liability, total pension expense, total deferred outflows of resources, and total deferred inflows of resources, for the total of all of the participating teacher employers for the Virginia Retirement System Teacher Retirement Plan as of and for the year ended June 30, 2019, 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 *Government Auditing Standards*, 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, 2019, and our report thereon, dated December 13, 2019, 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 the Virginia Retirement System Teacher Retirement Plan employers and their auditors and is not intended to be and should not be used by anyone other than these specified parties.

Martha S. Mavredes
AUDITOR OF PUBLIC ACCOUNTS

ZLB/clj

**Virginia Retirement System
VRS Teacher Retirement Plan
Schedule of Employer Allocations
For the Plan Year Ended and Measurement Date of June 30, 2019**

Employer Code	Employer	Employer Contributions	Employer Allocation Percentage
40100	Accomack County School Board	\$ 4,317,242	0.33688 %
40101	Albemarle County Schools	14,849,314	1.15871 %
40102	Alleghany County School Board	1,753,675	0.13684 %
40103	Amelia County School Board	1,251,063	0.09762 %
40104	Amherst County School Board	3,642,767	0.28425 %
40105	Appomattox County School Board	1,731,624	0.13512 %
40106	Arlington Public Schools	47,253,709	3.68727 %
40107	Augusta County School Board	9,055,663	0.70662 %
40108	Bath County School Board	696,997	0.05439 %
40109	Bedford County School Board	7,967,770	0.62173 %
40110	Bland County School Board	535,709	0.04180 %
40111	Botetourt County Schools	4,268,700	0.33309 %
40112	Brunswick County Public Schools	1,378,861	0.10759 %
40113	Buchanan County School Board	2,101,070	0.16395 %
40114	Buckingham County School Board	1,651,385	0.12886 %
40115	Campbell County School Board	6,099,823	0.47598 %
40116	Caroline County School Board	3,262,554	0.25458 %
40117	Carroll County School Board	3,259,708	0.25436 %
40118	Charles City County School Board	655,188	0.05113 %
40119	Charlotte County School Board	1,710,602	0.13348 %
40120	Chesterfield County School Board	47,786,369	3.72883 %
40121	Clarke County School Board	1,915,267	0.14945 %
40122	Craig County School Board	544,135	0.04246 %
40123	Culpeper County School Board	6,982,127	0.54482 %
40124	Cumberland County School Board	1,221,265	0.09530 %
40125	Dickenson County School Board	1,476,075	0.11518 %
40126	Dinwiddie County School Board	3,628,519	0.28314 %
40128	Essex County Public Schools	1,195,391	0.09328 %
40129	Fairfax County School Board	236,695,060	18.46968 %
40130	Fauquier County School Board	11,554,803	0.90164 %
40131	Floyd County School Board	1,694,195	0.13220 %
40132	Fluvanna County Public Schools	3,791,174	0.29583 %
40133	Franklin County Public Schools	6,632,588	0.51755 %
40134	Frederick County School Board	14,175,476	1.10613 %
40135	Giles County Schools	1,933,433	0.15087 %
40136	Gloucester County School Board	4,784,384	0.37333 %
40137	Goochland County School Board	2,373,459	0.18520 %

**Virginia Retirement System
VRS Teacher Retirement Plan
Schedule of Employer Allocations
For the Plan Year Ended and Measurement Date of June 30, 2019**

Employer Code	Employer	Employer Contributions	Employer Allocation Percentage
40138	Grayson County School Board	1,337,975	0.10440 %
40139	Greene County Public Schools	2,684,578	0.20948 %
40140	Greensville County School Board	2,047,927	0.15980 %
40141	Halifax County School Board	4,246,045	0.33132 %
40142	Hanover County School Board	15,837,890	1.23585 %
40143	Henrico County School Board	42,375,570	3.30662 %
40144	Henry County Public Schools	5,742,495	0.44809 %
40145	Highland County Public Schools	291,131	0.02272 %
40146	Isle of Wight County Schools	4,771,129	0.37230 %
40148	King George County School Board	3,599,745	0.28089 %
40149	King & Queen County School Board	708,396	0.05528 %
40150	King William County School Board	1,862,772	0.14535 %
40151	Lancaster County Public Schools	1,164,160	0.09084 %
40152	Lee County School Board	2,852,616	0.22259 %
40153	Loudoun County School Board	95,362,004	7.44121 %
40154	Louisa County Public Schools	4,471,730	0.34893 %
40155	Lunenburg County School Board	1,254,083	0.09786 %
40156	Madison County School Board	1,541,453	0.12028 %
40157	Mathews County School Board	1,017,427	0.07939 %
40158	Mecklenburg County School Board	3,531,727	0.27559 %
40159	Middlesex County School Board	1,365,093	0.10652 %
40160	Montgomery County School Board	8,130,177	0.63441 %
40162	Nelson County Public Schools	1,815,913	0.14170 %
40163	New Kent County School Board	2,607,276	0.20345 %
40165	Northampton County Schools	1,452,768	0.11336 %
40166	Northumberland County School Board	1,266,384	0.09882 %
40167	Nottoway County School Board	1,700,907	0.13272 %
40168	Orange County Public Schools	4,118,715	0.32139 %
40169	Page County Public Schools	2,857,022	0.22294 %
40170	Patrick County School Board	1,952,432	0.15235 %
40171	Pittsylvania County School Board	6,863,657	0.53558 %
40172	Powhatan County School Board	3,770,593	0.29422 %
40173	Prince Edward County School Board	1,785,470	0.13932 %
40174	Prince George County School Board	5,014,219	0.39127 %
40176	Prince William County School Board	84,726,879	6.61134 %
40177	Pulaski County School Board	3,309,996	0.25828 %
40178	Rappahannock County School Board	886,523	0.06918 %
40179	Richmond County School Board	1,076,144	0.08397 %

**Virginia Retirement System
VRS Teacher Retirement Plan
Schedule of Employer Allocations
For the Plan Year Ended and Measurement Date of June 30, 2019**

Employer Code	Employer	Employer Contributions	Employer Allocation Percentage
40180	Roanoke County School Board	11,946,567	0.93221 %
40181	Rockbridge County School Board	2,674,582	0.20870 %
40182	Rockingham County School Board	10,399,356	0.81147 %
40183	Russell County School Board	2,854,073	0.22271 %
40184	Scott County School Board	3,159,929	0.24657 %
40185	Shenandoah County School Board	5,724,764	0.44671 %
40186	Smyth County School Board	3,478,565	0.27144 %
40187	Southampton County School Board	2,088,514	0.16297 %
40188	Spotsylvania County School Board	20,256,640	1.58065 %
40189	Stafford County School Board	24,371,587	1.90174 %
40190	Surry County Schools	1,197,213	0.09342 %
40191	Sussex County School Board	1,227,843	0.09581 %
40192	Tazewell County Schools	3,826,971	0.29862 %
40193	Warren County School Board	4,609,126	0.35966 %
40195	Washington County School Board	5,469,095	0.42676 %
40196	Westmoreland County School Board	1,449,843	0.11313 %
40197	Wise County School Board	4,309,336	0.33626 %
40198	Wythe County School Board	3,238,344	0.25269 %
40199	York County School Board	10,915,745	0.85177 %
40200	Alexandria City School Board	23,740,092	1.85247 %
40201	Bristol City School Board	1,909,912	0.14903 %
40202	Buena Vista City Schools	809,865	0.06319 %
40203	Charlottesville Public Schools	6,165,180	0.48108 %
40205	Danville City Schools	5,422,500	0.42312 %
40206	Fredericksburg City Schools	3,629,710	0.28323 %
40207	Hampton City Schools	16,645,974	1.29891 %
40208	Harrisonburg City School Board	6,309,660	0.49235 %
40209	Hopewell City School Board	3,999,587	0.31209 %
40210	Lynchburg Public Schools	8,323,399	0.64949 %
40211	Newport News Public Schools	25,217,034	1.96772 %
40212	Norfolk Public Schools	32,610,188	2.54461 %
40213	Petersburg City Schools	3,640,493	0.28407 %
40214	Portsmouth School Board	12,692,239	0.99039 %
40215	Radford City School Board	1,375,117	0.10730 %
40216	Richmond Public Schools	26,141,439	2.03985 %
40217	Roanoke City School Board	12,653,417	0.98736 %
40219	Staunton City Schools	2,651,420	0.20689 %
40220	Suffolk City School Board	12,563,658	0.98036 %

**Virginia Retirement System
VRS Teacher Retirement Plan
Schedule of Employer Allocations
For the Plan Year Ended and Measurement Date of June 30, 2019**

Employer Code	Employer	Employer Contributions	Employer Allocation Percentage
40222	Winchester Public Schools	4,524,669	0.35307 %
40223	Martinsville City Schools	1,840,446	0.14361 %
40224	Falls Church Public Schools	4,225,485	0.32972 %
40225	Colonial Heights City Schools	2,989,247	0.23325 %
40230	Covington City School Board	846,209	0.06603 %
40231	Fairfax City School Board	14,918	0.00116 %
40232	Franklin City Public Schools	1,023,588	0.07987 %
40233	Chesapeake Public Schools	36,880,496	2.87783 %
40234	Virginia Beach City School Board	64,056,333	4.99839 %
40236	Manassas Park City Schools	3,355,913	0.26187 %
40306	Town of West Point School Board	873,296	0.06814 %
40307	Lexington City School Board	472,670	0.03688 %
40308	Waynesboro Public Schools	2,763,669	0.21565 %
40309	Town of Colonial Beach Schools	548,406	0.04279 %
40313	Galax City Schools	1,139,606	0.08892 %
40314	Norton City Schools	538,692	0.04203 %
40332	Manassas City Schools	8,668,259	0.67639 %
40335	City of Salem Schools	3,538,775	0.27613 %
40402	Williamsburg-James City County School Board	11,049,526	0.86221 %
40403	Poquoson City Public Schools	1,816,800	0.14177 %
40410	Valley Vocational Technical Center	308,280	0.02406 %
40412	Charlottesville/Albemarle Vo-Tech Center	182,898	0.01427 %
40413	The Pruden Center for Industry and Technology	—	— %
40414	Jackson River Technical Center	89,319	0.00697 %
40415	New Horizons Technical Center	1,357,537	0.10593 %
40416	Northern Neck Regional Vocational Center	180,599	0.01409 %
40417	Rowanty Vocational Technical Center	119,168	0.00930 %
40418	Amelia-Nottoway Vocational Center	40,566	0.00317 %
40421	Northern Neck Regional Special Education Program	128,563	0.01003 %
40423	Maggie Walker Governor's School for Govt & Intl Studies	673,873	0.05258 %
40424	Appomattox Region Governor's School	288,617	0.02252 %
40425	Bridging Communities Regional Career and Tech Center	74,578	0.00582 %
Total for Teacher Employers		<u>\$ 1,281,538,143</u>	<u>100.00000 %</u>

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

Virginia Retirement System
VRS Teacher Retirement Plan
Schedule of Net Pension Liability and Total Pension Expense
As of the Measurement Date and For the Plan Year Ended June 30, 2019

Employer Code	Employer	Net Pension Liability	Total Pension Expense
40100	Accomack County School Board	\$ 44,335,323	\$ 4,321,202
40101	Albemarle County Schools	152,492,821	17,467,609
40102	Alleghany County School Board	18,008,921	939,148
40103	Amelia County School Board	12,847,347	1,165,523
40104	Amherst County School Board	37,408,916	3,168,913
40105	Appomattox County School Board	17,782,560	1,757,947
40106	Arlington Public Schools	485,265,685	58,512,360
40107	Augusta County School Board	92,995,208	9,099,436
40108	Bath County School Board	7,158,033	674,580
40109	Bedford County School Board	81,823,201	7,886,039
40110	Bland County School Board	5,501,118	217,417
40111	Botetourt County Schools	43,836,537	4,038,249
40112	Brunswick County Public Schools	14,159,456	727,719
40113	Buchanan County School Board	21,576,752	1,023,318
40114	Buckingham County School Board	16,958,708	1,575,507
40115	Campbell County School Board	62,641,672	5,732,875
40116	Caroline County School Board	33,504,175	3,510,170
40117	Carroll County School Board	33,475,221	3,074,616
40118	Charles City County School Board	6,728,999	443,491
40119	Charlotte County School Board	17,566,726	1,325,482
40120	Chesterfield County School Board	490,735,218	54,374,767
40121	Clarke County School Board	19,668,469	1,950,267
40122	Craig County School Board	5,587,978	407,081
40123	Culpeper County School Board	71,701,408	7,560,969
40124	Cumberland County School Board	12,542,022	1,285,128
40125	Dickenson County School Board	15,158,343	1,007,955
40126	Dinwiddie County School Board	37,262,833	3,956,015
40128	Essex County Public Schools	12,276,178	892,263
40129	Fairfax County School Board	2,430,714,832	269,830,679
40130	Fauquier County School Board	118,660,948	11,019,546
40131	Floyd County School Board	17,398,272	1,845,513
40132	Fluvanna County Public Schools	38,932,909	3,697,648
40133	Franklin County Public Schools	68,112,521	7,407,271
40134	Frederick County School Board	145,572,994	17,215,530
40135	Giles County Schools	19,855,350	2,019,089
40136	Gloucester County School Board	49,132,350	4,813,478
40137	Goochland County School Board	24,373,372	2,682,209

Virginia Retirement System
VRS Teacher Retirement Plan
Schedule of Net Pension Liability and Total Pension Expense
As of the Measurement Date and For the Plan Year Ended June 30, 2019

Employer Code	Employer	Net Pension Liability	Total Pension Expense
40138	Grayson County School Board	13,739,633	878,226
40139	Greene County Public Schools	27,568,758	2,995,415
40140	Greensville County School Board	21,030,589	2,095,777
40141	Halifax County School Board	43,603,595	3,417,126
40142	Hanover County School Board	162,644,883	15,789,305
40143	Henrico County School Board	435,169,982	45,631,395
40144	Henry County Public Schools	58,971,190	5,506,218
40145	Highland County Public Schools	2,990,081	302,670
40146	Isle of Wight County Schools	48,996,795	4,521,756
40148	King George County School Board	36,966,721	4,500,055
40149	King & Queen County School Board	7,275,162	537,684
40150	King William County School Board	19,128,886	1,943,817
40151	Lancaster County Public Schools	11,955,060	1,065,509
40152	Lee County School Board	29,294,108	2,615,033
40153	Loudoun County School Board	979,305,522	137,828,783
40154	Louisa County Public Schools	45,921,171	5,133,680
40155	Lunenburg County School Board	12,878,932	1,131,936
40156	Madison County School Board	15,829,532	1,366,454
40157	Mathews County School Board	10,448,175	952,812
40158	Mecklenburg County School Board	36,269,210	3,042,224
40159	Middlesex County School Board	14,018,637	1,708,202
40160	Montgomery County School Board	83,491,961	9,212,332
40162	Nelson County Public Schools	18,648,526	1,751,282
40163	New Kent County School Board	26,775,176	3,002,795
40165	Northampton County Schools	14,918,820	1,281,244
40166	Northumberland County School Board	13,005,274	1,416,973
40167	Nottoway County School Board	17,466,706	1,445,112
40168	Orange County Public Schools	42,296,751	4,133,799
40169	Page County Public Schools	29,340,171	2,550,122
40170	Patrick County School Board	20,050,126	1,653,596
40171	Pittsylvania County School Board	70,485,372	7,890,116
40172	Powhatan County School Board	38,721,024	3,785,257
40173	Prince Edward County School Board	18,335,303	1,052,106
40174	Prince George County School Board	51,493,355	4,733,862
40176	Prince William County School Board	870,089,914	99,096,477
40177	Pulaski County School Board	33,991,116	2,489,340
40178	Rappahannock County School Board	9,104,481	768,199
40179	Richmond County School Board	11,050,930	1,148,744
40180	Roanoke County School Board	122,684,133	11,549,693

Virginia Retirement System
VRS Teacher Retirement Plan
Schedule of Net Pension Liability and Total Pension Expense
As of the Measurement Date and For the Plan Year Ended June 30, 2019

Employer Code	Employer	Net Pension Liability	Total Pension Expense
40181	Rockbridge County School Board	27,466,106	2,803,460
40182	Rockingham County School Board	106,794,064	11,325,763
40183	Russell County School Board	29,309,901	2,718,616
40184	Scott County School Board	32,450,014	3,170,830
40185	Shenandoah County School Board	58,789,575	6,541,201
40186	Smyth County School Board	35,723,046	2,420,321
40187	Southampton County School Board	21,447,778	2,091,860
40188	Spotsylvania County School Board	208,022,522	20,315,058
40189	Stafford County School Board	250,279,791	25,177,450
40190	Surry County Schools	12,294,603	879,204
40191	Sussex County School Board	12,609,141	1,067,929
40192	Tazewell County Schools	39,300,089	2,494,732
40193	Warren County School Board	47,333,300	4,452,260
40195	Washington County School Board	56,164,041	4,393,187
40196	Westmoreland County School Board	14,888,550	1,448,827
40197	Wise County School Board	44,253,727	3,146,102
40198	Wythe County School Board	33,255,440	2,802,547
40199	York County School Board	112,097,772	12,490,811
40200	Alexandria City School Board	243,795,579	27,213,613
40201	Bristol City School Board	19,613,195	1,534,593
40202	Buena Vista City Schools	8,316,163	750,725
40203	Charlottesville Public Schools	63,312,862	6,898,837
40205	Danville City Schools	55,684,997	4,804,958
40206	Fredericksburg City Schools	37,274,678	4,279,243
40207	Hampton City Schools	170,943,938	13,356,134
40208	Harrisonburg City School Board	64,796,058	7,986,445
40209	Hopewell City School Board	41,072,818	4,214,578
40210	Lynchburg Public Schools	85,476,574	8,068,131
40211	Newport News Public Schools	258,963,134	24,495,380
40212	Norfolk Public Schools	334,885,136	27,337,490
40213	Petersburg City Schools	37,385,227	3,417,619
40214	Portsmouth School Board	130,340,952	11,350,493
40215	Radford City School Board	14,121,290	1,397,162
40216	Richmond Public Schools	268,455,852	29,109,987
40217	Roanoke City School Board	129,942,187	14,078,499
40219	Staunton City Schools	27,227,900	2,522,313
40220	Suffolk City School Board	129,020,948	14,322,110
40222	Winchester Public Schools	46,466,019	4,635,443
40223	Martinsville City Schools	18,899,892	1,592,337

Virginia Retirement System
VRS Teacher Retirement Plan
Schedule of Net Pension Liability and Total Pension Expense
As of the Measurement Date and For the Plan Year Ended June 30, 2019

Employer Code	Employer	Net Pension Liability	Total Pension Expense
40224	Falls Church Public Schools	43,393,026	5,818,157
40225	Colonial Heights City Schools	30,697,025	2,651,509
40230	Covington City School Board	8,689,923	810,187
40231	Fairfax City School Board	152,663	15,519
40232	Franklin City Public Schools	10,511,346	481,063
40233	Chesapeake Public Schools	378,738,781	38,320,870
40234	Virginia Beach City School Board	657,816,528	64,181,055
40236	Manassas Park City Schools	34,463,580	4,265,899
40306	Town of West Point School Board	8,967,611	1,072,810
40307	Lexington City School Board	4,853,617	547,479
40308	Waynesboro Public Schools	28,380,766	2,467,951
40309	Town of Colonial Beach Schools	5,631,408	556,985
40313	Galax City Schools	11,702,378	1,176,886
40314	Norton City Schools	5,531,387	377,316
40332	Manassas City Schools	89,016,768	8,859,064
40335	City of Salem Schools	36,340,277	3,269,689
40402	Williamsburg-James City County School Board	113,471,736	12,023,046
40403	Poquoson City Public Schools	18,657,738	1,828,384
40410	Valley Vocational Technical Center	3,166,433	301,895
40412	Charlottesville/Albemarle Vo-Tech Center	1,878,013	136,871
40413	The Pruden Center for Industry and Technology	—	(450,976)
40414	Jackson River Technical Center	917,292	(27,746)
40415	New Horizons Technical Center	13,940,990	1,536,201
40416	Northern Neck Regional Vocational Center	1,854,324	208,010
40417	Rowanty Vocational Technical Center	1,223,933	125,715
40418	Amelia-Nottoway Vocational Center	417,190	49,897
40421	Northern Neck Regional Special Education Program	1,320,005	54,877
40423	Maggie Walker Governor's School for Govt & Intl Studies	6,919,827	654,513
40424	Appomattox Region Governor's School	2,963,760	316,496
40425	Bridging Communities Regional Career and Tech Center	765,945	141,868
Total for Teacher Employers		<u>\$ 13,160,568,266</u>	<u>\$ 1,395,429,873</u>

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

Virginia Retirement System
VRS Teacher Retirement Plan
Schedule of Deferred Outflows and Deferred Inflows of Resources by Employer
As of the Measurement Date of June 30, 2019

Employer Code	Employer	Deferred Outflows of Resources					Deferred Inflows of Resources				
		Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Earnings on Pension Plan Investments	Change of Assumptions	Changes in Proportionate Share	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Earnings on Pension Plan Investments	Change of Assumptions	Changes in Proportionate Share	Total Deferred Inflows of Resources
40100	Accomack County School Board	\$ —	\$ —	\$ 4,390,236	\$ 333,205	\$ 4,723,441	\$ 2,838,978	\$ 973,498	\$ —	\$ 1,205,448	\$ 5,017,924
40101	Albemarle County Schools	—	—	15,100,364	4,184,737	19,285,101	9,764,759	3,348,381	—	176,344	13,289,484
40102	Alleghany County School Board	—	—	1,783,305	—	1,783,305	1,153,187	395,433	—	1,795,938	3,344,558
40103	Amelia County School Board	—	—	1,272,189	99,248	1,371,437	822,671	282,097	—	1,175,275	2,280,043
40104	Amherst County School Board	—	—	3,704,360	—	3,704,360	2,395,452	821,411	—	1,995,098	5,211,961
40105	Appomattox County School Board	—	—	1,760,890	310,140	2,071,030	1,138,692	390,463	—	604,077	2,133,232
40106	Arlington Public Schools	—	—	48,052,680	14,553,926	62,606,606	31,073,612	10,655,283	—	2,148,874	43,877,769
40107	Augusta County School Board	—	—	9,208,706	639,816	9,848,522	5,954,877	2,041,954	—	3,264,637	11,261,468
40108	Bath County School Board	—	—	708,813	32,932	741,745	458,359	157,173	—	543,403	1,158,935
40109	Bedford County School Board	—	—	8,102,415	1,092,832	9,195,247	5,239,485	1,796,643	—	1,652,420	8,688,548
40110	Bland County School Board	—	—	544,740	53,387	598,127	352,261	120,791	—	891,816	1,364,868
40111	Botetourt County Schools	—	—	4,340,845	16,812	4,357,657	2,807,039	962,546	—	1,367,425	5,137,010
40112	Brunswick County Public Schools	—	—	1,402,118	—	1,402,118	906,690	310,908	—	1,676,683	2,894,281
40113	Buchanan County School Board	—	—	2,136,604	—	2,136,604	1,381,650	473,774	—	2,682,904	4,538,328
40114	Buckingham County School Board	—	—	1,679,310	90,950	1,770,260	1,085,938	372,373	—	1,015,440	2,473,751
40115	Campbell County School Board	—	—	6,202,994	—	6,202,994	4,011,210	1,375,463	—	1,765,082	7,151,755
40116	Caroline County School Board	—	—	3,317,699	237,202	3,554,901	2,145,414	735,672	—	537,981	3,419,067
40117	Carroll County School Board	—	—	3,314,832	507,178	3,822,010	2,143,560	735,036	—	2,177,630	5,056,226
40118	Charles City County School Board	—	—	666,329	77,089	743,418	430,886	147,753	—	818,944	1,397,583
40119	Charlotte County School Board	—	—	1,739,518	42,106	1,781,624	1,124,872	385,724	—	1,183,771	2,694,367
40120	Chesterfield County School Board	—	—	48,594,291	8,535,910	57,130,201	31,423,849	10,775,381	—	3,579,581	45,778,811
40121	Clarke County School Board	—	—	1,947,640	51,463	1,999,103	1,259,456	431,873	—	388,826	2,080,155
40122	Craig County School Board	—	—	553,341	—	553,341	357,822	122,699	—	367,493	848,014
40123	Culpeper County School Board	—	—	7,100,120	201,748	7,301,868	4,591,343	1,574,393	—	895,595	7,061,331
40124	Cumberland County School Board	—	—	1,241,954	85,687	1,327,641	803,119	275,393	—	666,080	1,744,592
40125	Dickenson County School Board	—	—	1,501,031	44,008	1,545,039	970,652	332,841	—	1,819,749	3,123,242
40126	Dinwiddie County School Board	—	—	3,689,894	535,443	4,225,337	2,386,097	818,203	—	1,163,765	4,368,065
40128	Essex County Public Schools	—	—	1,215,629	6,455	1,222,084	786,095	269,556	—	1,164,663	2,220,314
40129	Fairfax County School Board	—	—	240,697,761	47,478,925	288,176,686	155,648,937	53,372,737	—	3,104,880	212,126,554
40130	Fauquier County School Board	—	—	11,750,216	—	11,750,216	7,598,362	2,605,513	—	3,400,575	13,604,450

Virginia Retirement System
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Employer Code	Employer	Deferred Outflows of Resources					Deferred Inflows of Resources				
		Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Earnings on Pension Plan Investments	Change of Assumptions	Changes in Proportionate Share	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Earnings on Pension Plan Investments	Change of Assumptions	Changes in Proportionate Share	Total Deferred Inflows of Resources
40131	Floyd County School Board	—	—	1,722,837	453,886	2,176,723	1,114,084	382,025	—	389,983	1,886,092
40132	Fluvanna County Public Schools	—	—	3,855,271	181,830	4,037,101	2,493,039	854,874	—	1,189,764	4,537,677
40133	Franklin County Public Schools	—	—	6,744,736	1,382,774	8,127,510	4,361,532	1,495,589	—	1,398,607	7,255,728
40134	Frederick County School Board	—	—	14,415,139	3,709,726	18,124,865	9,321,653	3,196,438	—	1,200,490	13,718,581
40135	Giles County Schools	—	—	1,966,145	123,198	2,089,343	1,271,422	435,976	—	636,071	2,343,469
40136	Gloucester County School Board	—	—	4,865,254	992,380	5,857,634	3,146,151	1,078,830	—	1,260,025	5,485,006
40137	Goochland County School Board	—	—	2,413,535	229,930	2,643,465	1,560,731	535,181	—	474,005	2,569,917
40138	Grayson County School Board	—	—	1,360,546	211,942	1,572,488	879,806	301,690	—	1,540,609	2,722,105
40139	Greene County Public Schools	—	—	2,729,953	256,666	2,986,619	1,765,343	605,345	—	816,576	3,187,264
40140	Greenville County School Board	—	—	2,082,521	439,325	2,521,846	1,346,677	461,782	—	551,328	2,359,787
40141	Halifax County School Board	—	—	4,317,778	152,562	4,470,340	2,792,122	957,431	—	3,292,046	7,041,599
40142	Hanover County School Board	—	—	16,105,656	203,054	16,308,710	10,414,839	3,571,296	—	3,380,980	17,367,115
40143	Henrico County School Board	—	—	43,092,030	3,376,045	46,468,075	27,865,772	9,555,300	—	1,719,782	39,140,854
40144	Henry County Public Schools	—	—	5,839,530	56,273	5,895,803	3,776,174	1,294,867	—	1,604,037	6,675,078
40145	Highland County Public Schools	—	—	296,088	74,743	370,831	191,468	65,655	—	191,939	449,062
40146	Isle of Wight County Schools	—	—	4,851,831	427,442	5,279,273	3,137,472	1,075,853	—	411,754	4,625,079
40148	King George County School Board	—	—	3,660,572	1,635,995	5,296,567	2,367,136	811,701	—	511,507	3,690,344
40149	King & Queen County School Board	—	—	720,412	57,337	777,749	465,860	159,745	—	321,871	947,476
40150	King William County School Board	—	—	1,894,208	47,000	1,941,208	1,224,903	420,025	—	801,762	2,446,690
40151	Lancaster County Public Schools	—	—	1,183,831	—	1,183,831	765,533	262,505	—	668,597	1,696,635
40152	Lee County School Board	—	—	2,900,804	135,615	3,036,419	1,875,826	643,229	—	1,431,467	3,950,522
40153	Loudoun County School Board	—	—	96,974,206	81,876,944	178,851,150	62,709,069	21,503,226	—	—	84,212,295
40154	Louisa County Public Schools	—	—	4,547,272	778,956	5,326,228	2,940,526	1,008,320	—	430,217	4,379,063
40155	Lunenburg County School Board	—	—	1,275,316	216,321	1,491,637	824,692	282,791	—	718,368	1,825,851
40156	Madison County School Board	—	—	1,567,495	80,081	1,647,576	1,013,632	347,579	—	779,681	2,140,892
40157	Mathews County School Board	—	—	1,034,614	—	1,034,614	669,041	229,417	—	469,151	1,367,609
40158	Mecklenburg County School Board	—	—	3,591,502	445,050	4,036,552	2,322,471	796,386	—	1,658,237	4,777,094
40159	Middlesex County School Board	—	—	1,388,174	1,366,721	2,754,895	897,673	307,816	—	124,601	1,330,090
40160	Montgomery County School Board	—	—	8,267,662	1,319,853	9,587,515	5,346,344	1,833,285	—	516,159	7,695,788
40162	Nelson County Public Schools	—	—	1,846,641	51,463	1,898,104	1,194,144	409,477	—	659,971	2,263,592
40163	New Kent County School Board	—	—	2,651,370	573,917	3,225,287	1,714,528	587,919	—	31,973	2,334,420

Virginia Retirement System
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		Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Earnings on Pension Plan Investments	Change of Assumptions	Changes in Proportionate Share	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Earnings on Pension Plan Investments	Change of Assumptions	Changes in Proportionate Share	Total Deferred Inflows of Resources
40165	Northampton County Schools	—	—	1,477,313	—	1,477,313	955,315	327,582	—	516,357	1,799,254
40166	Northumberland County School Board	—	—	1,287,827	376,716	1,664,543	832,782	285,565	—	562,208	1,680,555
40167	Nottoway County School Board	—	—	1,729,613	—	1,729,613	1,118,467	383,527	—	1,208,006	2,710,000
40168	Orange County Public Schools	—	—	4,188,370	134,925	4,323,295	2,708,440	928,736	—	1,882,186	5,519,362
40169	Page County Public Schools	—	—	2,905,365	36,380	2,941,745	1,878,775	644,241	—	1,480,610	4,003,626
40170	Patrick County School Board	—	—	1,985,433	—	1,985,433	1,283,895	440,253	—	1,766,840	3,490,988
40171	Pittsylvania County School Board	—	—	6,979,704	2,083,103	9,062,807	4,513,475	1,547,692	—	1,616,042	7,677,209
40172	Powhatan County School Board	—	—	3,834,289	166,226	4,000,515	2,479,470	850,222	—	1,095,751	4,425,443
40173	Prince Edward County School Board	—	—	1,815,625	89,670	1,905,295	1,174,086	402,600	—	1,743,156	3,319,842
40174	Prince George County School Board	—	—	5,099,049	234,124	5,333,173	3,297,337	1,130,672	—	2,722,198	7,150,207
40176	Prince William County School Board	—	—	86,159,300	16,485,104	102,644,404	55,715,532	19,105,110	—	7,010,900	81,831,542
40177	Pulaski County School Board	—	—	3,365,917	—	3,365,917	2,176,595	746,364	—	2,415,796	5,338,755
40178	Rappahannock County School Board	—	—	901,557	—	901,557	582,998	199,913	—	433,376	1,216,287
40179	Richmond County School Board	—	—	1,094,301	323,268	1,417,569	707,637	242,652	—	234,681	1,184,970
40180	Roanoke County School Board	—	—	12,148,605	1,869,994	14,018,599	7,855,984	2,693,852	—	4,725,899	15,275,735
40181	Rockbridge County School Board	—	—	2,719,788	432,042	3,151,830	1,758,770	603,091	—	205,718	2,567,579
40182	Rockingham County School Board	—	—	10,575,116	873,342	11,448,458	6,838,475	2,344,944	—	2,094,225	11,277,644
40183	Russell County School Board	—	—	2,902,367	55,157	2,957,524	1,876,836	643,576	—	1,031,476	3,551,888
40184	Scott County School Board	—	—	3,213,312	181,116	3,394,428	2,077,912	712,525	—	870,146	3,660,583
40185	Shenandoah County School Board	—	—	5,821,546	1,965,691	7,787,237	3,764,545	1,290,880	—	869,545	5,924,970
40186	Smyth County School Board	—	—	3,537,419	—	3,537,419	2,287,498	784,393	—	2,708,662	5,780,553
40187	Southampton County School Board	—	—	2,123,833	93,879	2,217,712	1,373,392	470,942	—	437,243	2,281,577
40188	Spotsylvania County School Board	—	—	20,599,107	1,666,899	22,266,006	13,320,561	4,567,681	—	4,663,217	22,551,459
40189	Stafford County School Board	—	—	24,783,567	4,119,680	28,903,247	16,026,473	5,495,550	—	3,753,339	25,275,362
40190	Surry County Schools	—	—	1,217,454	721	1,218,175	787,275	269,960	—	959,482	2,016,717
40191	Sussex County School Board	—	—	1,248,601	143,949	1,392,550	807,417	276,867	—	568,895	1,653,179
40192	Tazewell County Schools	—	—	3,891,630	—	3,891,630	2,516,551	862,937	—	4,748,887	8,128,375
40193	Warren County School Board	—	—	4,687,106	95,128	4,782,234	3,030,950	1,039,327	—	1,240,751	5,311,028
40195	Washington County School Board	—	—	5,561,557	—	5,561,557	3,596,421	1,233,229	—	3,040,329	7,869,979
40196	Westmoreland County School Board	—	—	1,474,316	522,140	1,996,456	953,378	326,917	—	1,058,712	2,339,007
40197	Wise County School Board	—	—	4,382,156	1,181,093	5,563,249	2,833,753	971,707	—	4,143,818	7,949,278

Virginia Retirement System
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Employer Code	Employer	Deferred Outflows of Resources					Deferred Inflows of Resources				
		Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Earnings on Pension Plan Investments	Change of Assumptions	Changes in Proportionate Share	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Earnings on Pension Plan Investments	Change of Assumptions	Changes in Proportionate Share	Total Deferred Inflows of Resources
40198	Wythe County School Board	—	—	3,293,068	—	3,293,068	2,129,486	730,211	—	1,654,599	4,514,296
40199	York County School Board	—	—	11,100,307	2,006,146	13,106,453	7,178,093	2,461,401	—	2,129,425	11,768,919
40200	Alexandria City School Board	—	—	24,141,478	3,925,807	28,067,285	15,611,261	5,353,172	—	1,327,742	22,292,175
40201	Bristol City School Board	—	—	1,942,166	—	1,942,166	1,255,916	430,659	—	1,129,452	2,816,027
40202	Buena Vista City Schools	—	—	823,495	9,975	833,470	532,519	182,603	—	446,411	1,161,533
40203	Charlottesville Public Schools	—	—	6,269,458	437,316	6,706,774	4,054,190	1,390,200	—	166,187	5,610,577
40205	Danville City Schools	—	—	5,514,120	3,929,971	9,444,091	3,565,746	1,222,710	—	2,742,487	7,530,943
40206	Fredericksburg City Schools	—	—	3,691,067	221,239	3,912,306	2,386,856	818,463	—	598,564	3,803,883
40207	Hampton City Schools	—	—	16,927,457	—	16,927,457	10,946,262	3,753,523	—	11,410,535	26,110,320
40208	Harrisonburg City School Board	—	—	6,416,329	3,154,170	9,570,499	4,149,165	1,422,768	—	17,905	5,589,838
40209	Hopewell City School Board	—	—	4,067,172	1,022,115	5,089,287	2,630,066	901,862	—	710,801	4,242,729
40210	Lynchburg Public Schools	—	—	8,464,185	850,690	9,314,875	5,473,426	1,876,863	—	7,071,532	14,421,821
40211	Newport News Public Schools	—	—	25,643,421	6,075	25,649,496	16,582,503	5,686,216	—	7,431,765	29,700,484
40212	Norfolk Public Schools	—	—	33,161,480	—	33,161,480	21,444,110	7,353,283	—	21,811,971	50,609,364
40213	Petersburg City Schools	—	—	3,702,014	309,772	4,011,786	2,393,934	820,891	—	1,943,362	5,158,187
40214	Portsmouth School Board	—	—	12,906,810	—	12,906,810	8,346,281	2,861,978	—	4,507,819	15,716,078
40215	Radford City School Board	—	—	1,398,339	196,144	1,594,483	904,246	310,070	—	374,668	1,588,984
40216	Richmond Public Schools	—	—	26,583,423	5,484,097	32,067,520	17,190,362	5,894,654	—	5,496,129	28,581,145
40217	Roanoke City School Board	—	—	12,867,323	509,739	13,377,062	8,320,747	2,853,222	—	1,910,588	13,084,557
40219	Staunton City Schools	—	—	2,696,200	104,491	2,800,691	1,743,517	597,860	—	1,168,700	3,510,077
40220	Suffolk City School Board	—	—	12,776,099	5,397,738	18,173,837	8,261,757	2,832,994	—	796,305	11,891,056
40222	Winchester Public Schools	—	—	4,601,225	138,460	4,739,685	2,975,415	1,020,284	—	2,188,476	6,184,175
40223	Martinsville City Schools	—	—	1,871,532	24,299	1,895,831	1,210,239	414,997	—	1,156,793	2,782,029
40224	Falls Church Public Schools	—	—	4,296,927	1,859,686	6,156,613	2,778,639	952,808	—	604,685	4,336,132
40225	Colonial Heights City Schools	—	—	3,039,725	—	3,039,725	1,965,660	674,034	—	878,048	3,517,742
40230	Covington City School Board	—	—	860,506	313,868	1,174,374	556,453	190,810	—	591,469	1,338,732
40231	Fairfax City School Board	—	—	15,117	721	15,838	9,775	3,352	—	4,203	17,330
40232	Franklin City Public Schools	—	—	1,040,870	—	1,040,870	673,086	230,804	—	1,897,556	2,801,446
40233	Chesapeake Public Schools	—	—	37,504,019	2,119,331	39,623,350	24,252,244	8,316,205	—	4,536,964	37,105,413
40234	Virginia Beach City School Board	—	—	65,139,258	364,490	65,503,748	42,122,770	14,444,090	—	13,871,882	70,438,742
40236	Manassas Park City Schools	—	—	3,412,702	1,088,018	4,500,720	2,206,849	756,738	—	1,444,368	4,407,955

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		Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Earnings on Pension Plan Investments	Change of Assumptions	Changes in Proportionate Share	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Earnings on Pension Plan Investments	Change of Assumptions	Changes in Proportionate Share	Total Deferred Inflows of Resources
40306	Town of West Point School Board	—	—	888,004	432,821	1,320,825	574,235	196,907	—	79,558	850,700
40307	Lexington City School Board	—	—	480,622	222,101	702,723	310,798	106,574	—	17,438	434,810
40308	Waynesboro Public Schools	—	—	2,810,361	83,852	2,894,213	1,817,341	623,174	—	1,369,767	3,810,282
40309	Town of Colonial Beach Schools	—	—	557,641	72,184	629,825	360,603	123,652	—	264,957	749,212
40313	Galax City Schools	—	—	1,158,810	320	1,159,130	749,353	256,956	—	238,714	1,245,023
40314	Norton City Schools	—	—	547,737	82,736	630,473	354,199	121,456	—	714,818	1,190,473
40332	Manassas City Schools	—	—	8,814,747	1,875,275	10,690,022	5,700,120	1,954,597	—	4,932,008	12,586,725
40335	City of Salem Schools	—	—	3,598,539	224,564	3,823,103	2,327,021	797,946	—	908,544	4,033,511
40402	Williamsburg-James City County School Board	—	—	11,236,362	1,570,882	12,807,244	7,266,074	2,491,570	—	1,967,018	11,724,662
40403	Poquoson City Public Schools	—	—	1,847,553	52,666	1,900,219	1,194,733	409,680	—	487,978	2,092,391
40410	Valley Vocational Technical Center	—	—	313,551	7,993	321,544	202,760	69,527	—	134,011	406,298
40412	Charlottesville/Albemarle Vo-Tech Center	—	—	185,967	302,657	488,624	120,257	41,237	—	242,495	403,989
40413	The Pruden Center for Industry and Technology	—	—	—	35,793	35,793	—	—	—	1,598,817	1,598,817
40414	Jackson River Technical Center	—	—	90,833	39,166	129,999	58,737	20,142	—	311,370	390,249
40415	New Horizons Technical Center	—	—	1,380,485	446,315	1,826,800	892,701	306,111	—	209,379	1,408,191
40416	Northern Neck Regional Vocational Center	—	—	183,622	39,287	222,909	118,740	40,717	—	104,782	264,239
40417	Rowanty Vocational Technical Center	—	—	121,198	96,055	217,253	78,373	26,875	—	94,286	199,534
40418	Amelia-Nottoway Vocational Center	—	—	41,312	56,743	98,055	26,714	9,161	—	6,882	42,757
40421	Northern Neck Regional Special Education Program	—	—	130,711	59,792	190,503	84,525	28,984	—	129,781	243,290
40423	Maggie Walker Governor's School for Govt & Intl Studies	—	—	685,225	53,624	738,849	443,105	151,943	—	379,882	974,930
40424	Appomattox Region Governor's School	—	—	293,482	161,822	455,304	189,782	65,077	—	161,798	416,657
40425	Bridging Communities Regional Career and Tech Center	—	—	75,847	101,509	177,356	49,048	16,818	—	95,010	160,876
Total for Teacher Employers		\$ —	\$ —	\$ 1,303,204,797	\$ 252,691,090	\$ 1,555,895,887	\$ 842,726,774	\$ 288,974,854	\$ —	\$ 252,691,090	\$ 1,384,392,718

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

**Virginia Retirement System
VRS Teacher Retirement Plan
Notes to GASB No. 68 Schedules
For the Plan Year Ended Date of June 30, 2019**

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). The VRS Teacher Retirement Plan is part of the VRS Trust Fund.

Administration and Management

The Board of Trustees (the Board) is responsible for the general administration and operation of the defined benefit 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 publicly available through the About VRS link on the VRS website at varetire.org, or a copy may be obtained by submitting a request to the VRS Chief Financial Officer, P.O. 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.

Pensions

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

Note 2. General Information about the Pension Plan

Plan Description

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

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

RETIREMENT PLAN PROVISIONS BY PLAN STRUCTURE		
PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
<p>About Plan 1 Plan 1 is a defined benefit plan. The retirement benefit is based on a member's age, service credit and average final compensation at retirement using a formula.</p>	<p>About Plan 2 Plan 2 is a defined benefit plan. The retirement benefit is based on a member's age, service credit and average final compensation at retirement using a formula.</p>	<p>About the Hybrid Retirement Plan The Hybrid Retirement Plan combines the features of a defined benefit plan and a defined contribution plan.</p> <ul style="list-style-type: none"> • The defined benefit is based on a member's age, service credit and average final compensation at retirement using a formula. • The benefit from the defined contribution component of the plan depends on the member and employer contributions made to the plan and the investment performance of those contributions. • In addition to the monthly benefit payment payable from the defined benefit plan at retirement, a member may start receiving distributions from the balance in the defined contribution account, reflecting the contributions, investment gains or losses, and any required fees.

PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
<p>Eligible Members Employees are in Plan 1 if their membership date is before July 1, 2010, and they were vested as of January 1, 2013, and they have not taken a refund.</p> <p><i>Hybrid Opt-In Election</i> VRS non-hazardous duty-covered Plan 1 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014. The Hybrid Retirement Plan's effective date for eligible Plan 1 members who opted in was July 1, 2014.</p> <p>If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement Plan.</p> <p>Members who were eligible for an optional retirement plan (ORP) and had prior service under Plan 1 were not eligible to elect the Hybrid Retirement Plan, and remain as Plan 1 or ORP.</p>	<p>Eligible Members Employees are in Plan 2 if their membership date is on or after July 1, 2010, or their membership date is before July 1, 2010, and they were not vested as of January 1, 2013.</p> <p><i>Hybrid Opt-In Election</i> Eligible Plan 2 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014.</p> <p>The Hybrid Retirement Plan's effective date for eligible Plan 2 members who opted in was July 1, 2014.</p> <p>If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement Plan.</p>	<p>Eligible Members Employees are in the Hybrid Retirement Plan if their membership date is on or after January 1, 2014. This includes:</p> <ul style="list-style-type: none"> • School division employees • Members in Plan 1 or Plan 2 who elected to opt into the plan during the election window held January 1-April 30, 2014; the plan's effective date for opt-in members was July 1, 2014
<p>Retirement Contributions Employees contribute 5% of their compensation each month to their member contribution account through a pretax salary reduction. Member contributions are tax-deferred until they are withdrawn as part of a retirement benefit or as a refund. The employer makes a separate actuarially determined contribution to VRS for all covered employees. VRS invests both member and employer contributions to provide funding for the future benefit payment.</p>	<p>Retirement Contributions Same as Plan 1.</p>	<p>Retirement Contributions A member's retirement benefit is funded through mandatory and voluntary contributions made by the member and the employer to both the defined benefit and the defined contribution components of the plan. Mandatory contributions are based on a percentage of the employee's creditable compensation and are required from both the member and the employer. Additionally, members may choose to make voluntary contributions to the defined contribution component of the plan, and the employer is required to match those voluntary contributions according to specified percentages.</p>

PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
<p>Service Credit Service credit includes active service. Members earn service credit for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional service credit the member was granted. A member's total service credit 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.</p>	<p>Service Credit Same as Plan 1.</p>	<p>Service Credit <i>Defined Benefit Component:</i> Under the defined benefit component of the plan, service credit includes active service. Members earn service credit for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional service credit the member was granted. A member's total service credit 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.</p> <p><i>Defined Contribution Component:</i> Under the defined contribution component, service credit is used to determine vesting for the employer contribution portion of the plan.</p>

PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
<p>Vesting Vesting is the minimum length of service a member needs to qualify for a future retirement benefit. Members become vested when they have at least five years (60 months) of service credit. Vesting means members are eligible to qualify for retirement if they meet the age and service requirements for their plan. Members also must be vested to receive a full refund of their member contribution account balance if they leave employment and request a refund.</p> <p>Members are always 100% vested in the contributions that they make.</p>	<p>Vesting Same as Plan 1.</p>	<p>Vesting <i>Defined Benefit Component:</i> Defined benefit vesting is the minimum length of service a member needs to qualify for a future retirement benefit. Members are vested under the defined benefit component of the Hybrid Retirement Plan when they reach five years (60 months) of service credit. Plan 1 or Plan 2 members with at least five years (60 months) of service credit who opted into the Hybrid Retirement Plan remain vested in the defined benefit component.</p> <p><i>Defined Contribution Component:</i> Defined contribution vesting refers to the minimum length of service a member needs to be eligible to withdraw the employer contributions from the defined contribution component of the plan.</p> <p>Members are always 100% vested in the contributions that they make.</p> <p>Upon retirement or leaving covered employment, a member is eligible to withdraw a percentage of employer contributions to the defined contribution component of the plan, based on service.</p> <ul style="list-style-type: none"> • 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. <p>Distributions not required, except as governed by law.</p>

PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
<p>Calculating the Benefit The basic benefit is determined using the average final compensation, service credit and plan multiplier. An early retirement reduction is applied to this amount if the member is retiring with a reduced benefit. In cases where the member has elected an optional form of retirement payment, an option factor specific to the option chosen is then applied.</p>	<p>Calculating the Benefit See definition under Plan 1.</p>	<p>Calculating the Benefit <i>Defined Benefit Component:</i> See definition under Plan 1.</p> <p><i>Defined Contribution Component:</i> The benefit is based on contributions made by the member and any matching contributions made by the employer, plus net investment earnings on those contributions.</p>
<p>Average Final Compensation A member's average final compensation is the average of the 36 consecutive months of highest compensation as a covered employee.</p>	<p>Average Final Compensation A member's average final compensation is the average of the 60 consecutive months of highest compensation as a covered employee.</p>	<p>Average Final Compensation Same as Plan 2. It is used in the retirement formula for the defined benefit component of the plan.</p>
<p>Service Retirement Multiplier The retirement multiplier is a factor used in the formula to determine a final retirement benefit. The retirement multiplier for members is 1.70%.</p>	<p>Service Retirement Multiplier Same as Plan 1 for service earned, purchased or granted prior to January 1, 2013. The retirement multiplier is 1.65% for service credit earned, purchased or granted on or after January 1, 2013.</p>	<p>Service Retirement Multiplier <i>Defined Benefit Component:</i> The retirement multiplier for the defined benefit component is 1.00%.</p> <p>For members who opted into the Hybrid Retirement Plan from Plan 1 or Plan 2, the applicable multipliers for those plans will be used to calculate the retirement benefit for service credited in those plans.</p> <p><i>Defined Contribution Component:</i> Not applicable.</p>
<p>Normal Retirement Age Age 65.</p>	<p>Normal Retirement Age Normal Social Security retirement age.</p>	<p>Normal Retirement Age <i>Defined Benefit Component:</i> Same as Plan 2.</p> <p><i>Defined Contribution Component:</i> Members are eligible to receive distributions upon leaving employment, subject to restrictions.</p>

PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
<p>Earliest Unreduced Retirement Eligibility Age 65 with at least five years (60 months) of service credit or at age 50 with at least 30 years of service credit.</p>	<p>Earliest Unreduced Retirement Eligibility Normal Social Security retirement age with at least five years (60 months) of service credit or when their age plus service credit equals 90.</p>	<p>Earliest Unreduced Retirement Eligibility <i>Defined Benefit Component:</i> Normal Social Security retirement age and have at least five years (60 months) of service credit or when their age and service equal 90.</p> <p><i>Defined Contribution Component:</i> Members are eligible to receive distributions upon leaving employment, subject to restrictions.</p>
<p>Earliest Reduced Retirement Eligibility Age 55 with at least five years (60 months) of service credit or age 50 with at least 10 years of service credit.</p>	<p>Earliest Reduced Retirement Eligibility Age 60 with at least five years (60 months) of service credit.</p>	<p>Earliest Reduced Retirement Eligibility <i>Defined Benefit Component:</i> Age 60 with at least five years (60 months) of service credit.</p> <p><i>Defined Contribution Component:</i> Members are eligible to receive distributions upon leaving employment, subject to restrictions.</p>

PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
<p>Cost-of-Living Adjustment (COLA) in Retirement</p> <p>The Cost-of-Living Adjustment (COLA) matches the first 3% increase in the Consumer Price Index for all Urban Consumers (CPI-U) and half of any additional increase (up to 4%) up to a maximum COLA of 5%.</p> <p><i>Eligibility:</i> For members who retire with an unreduced benefit or with a reduced benefit with at least 20 years of service credit, the COLA will go into effect on July 1 after one full calendar year from the retirement date.</p> <p>For members who retire with a reduced benefit and who have less than 20 years of service credit, the COLA will go into effect on July 1 after one calendar year following the unreduced retirement eligibility date.</p> <p><i>Exceptions to COLA Effective Dates:</i> The COLA is effective July 1 following one full calendar year (January 1 to December 31) under any of the following circumstances:</p> <ul style="list-style-type: none"> • 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. • 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. <p>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.</p>	<p>Cost-of-Living Adjustment (COLA) in Retirement</p> <p>The Cost-of-Living Adjustment (COLA) matches the first 2% increase in the CPI-U and half of any additional increase (up to 2%), for a maximum COLA of 3%.</p> <p><i>Eligibility:</i> Same as Plan 1.</p> <p><i>Exceptions to COLA Effective Dates:</i> Same as Plan 1.</p>	<p>Cost-of-Living Adjustment (COLA) in Retirement</p> <p><i>Defined Benefit Component:</i> Same as Plan 2.</p> <p><i>Defined Contribution Component:</i> Not applicable.</p> <p><i>Eligibility:</i> Same as Plan 1 and Plan 2.</p> <p><i>Exceptions to COLA Effective Dates:</i> Same as Plan 1 and Plan 2.</p>

PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
<p>Disability Coverage Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.70% on all service, regardless of when it was earned, purchased or granted.</p>	<p>Disability Coverage Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.65% on all service, regardless of when it was earned, purchased or granted.</p>	<p>Disability Coverage Employees of political subdivisions and school divisions (including Plan 1 and Plan 2 opt-ins) participate in the Virginia Local Disability Program (VLDP) unless their local governing body provides and employer-paid comparable program for its members.</p> <p>Hybrid members (including Plan 1 and Plan 2 opt-ins) covered under VLDP are subject to a one-year waiting period before becoming eligible for non-work-related disability benefits.</p>
<p>Purchase of Prior Service Members may be eligible to purchase service from previous public employment, active duty military service, an eligible period of leave or VRS refunded service as service credit in their plan. Prior service credit counts toward vesting, eligibility for retirement and the health insurance credit. Only active members are eligible to purchase prior service. Members also may be eligible to purchase periods of leave without pay.</p>	<p>Purchase of Prior Service Same as Plan 1.</p>	<p>Purchase of Prior Service <i>Defined Benefit Component:</i> Same as Plan 1, with the following exception: Hybrid Retirement Plan members are ineligible for ported service.</p> <p><i>Defined Contribution Component:</i> Not applicable.</p>

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 provided to school divisions by the Virginia General Assembly. Employees are required to contribute 5.00% of their compensation toward their retirement. Each school division's contractually required employer contribution rate for the year ended June 30, 2019, was 15.68% of covered employee compensation. This rate was based on the actuarial valuation as of June 30, 2017. The actuarially determined rate, when combined with employee contributions, was expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability.

Actuarial Assumptions and Methods

The total pension liability for the VRS Teacher Retirement Plan was based on an actuarial valuation as of June 30, 2018, 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, 2019.

Inflation	2.50%
Salary increases, including inflation	3.50% – 5.95%
Investment rate of return	6.75%, net of pension plan investment expenses, including inflation*

** Administrative expenses as a percent of the market value of assets for the last experience study were found to be approximately 0.06% of the market assets for all of the VRS plans. This would provide an assumed investment return rate for GASB purposes of slightly more than the assumed 6.75%. However, since the difference was minimal, and a more conservative 6.75% 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 6.75% to simplify preparation of pension liabilities.*

Mortality rates:

Pre-retirement:

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

Post-retirement:

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

Post-disablement:

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

The actuarial assumptions used in the June 30, 2018, valuation were based on the results of an actuarial experience study for the period from July 1, 2012, through June 30, 2016, except the change in the discount rate, which was based on VRS Board action effective as of July 1, 2019. Changes to the actuarial assumptions as a result of the experience study and VRS Board action are as follows:

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Update to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement from 70 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
Discount Rate	Decrease rate from 7.00% to 6.75%

Note 3. Net Pension Liability

The net pension liability (NPL) is calculated separately for each system and represents that particular system's total pension liability determined in accordance with GASB Statement No. 67, less that system's fiduciary net position. As of June 30, 2019, NPL amounts for the VRS Teacher Retirement Plan are as follows (amounts expressed in thousands):

Total Pension Liability	\$ 49,683,336
Plan Fiduciary Net Position	36,522,769
Employers' Net Pension Liability (Asset)	<u>\$ 13,160,567</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	73.51 %

The total pension 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 pension liability is disclosed in accordance with the requirements of GASB Statement No. 67 in the System's notes to the financial statements and required supplementary information.

Discount Rate

The discount rate used to measure the total pension liability was 6.75%. The projection of cash flows used to determine the discount rate assumes that member contributions are made per the VRS Statutes and the employer contributions are 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 school divisions for the VRS Teacher Retirement Plan was subject to the portion of the VRS Board-certified rates that were funded by the Virginia General Assembly which was 100% of the actuarially determined contribution rate. From July 1, 2019, on, school divisions are assumed to continue 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.

Long-Term Expected Rate of Return

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

Asset Class (Strategy)	Target Allocation	Arithmetic Long-Term Expected	Weighted Average Long-Term
Public Equity	34.00 %	5.61 %	1.91 %
Fixed Income	15.00 %	0.88 %	0.13 %
Credit Strategies	14.00 %	5.13 %	0.72 %
Real Assets	14.00 %	5.27 %	0.74 %
Private Equity	14.00 %	8.77 %	1.23 %
MAPS - Multi -Asset Public Strategies	6.00 %	3.52 %	0.21 %
PIP- Private Investment Partnership	3.00 %	6.29 %	0.19 %
Total	100.00 %		5.13 %
	Inflation		2.50 %
	* Expected arithmetic nominal return		7.63 %

* The above allocation provides a one-year return of 7.63%. 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 7.11%, including expected inflation of 2.50%. The VRS Board elected a long-term rate of 6.75% which is roughly at the 40th percentile of the expected long-term results of the VRS fund asset allocation.

Sensitivity Analysis

The following table presents the collective net pension liability of the participating employers in the VRS Teacher Retirement Plan using the discount rate of 6.75%, as well as what collective net pension liability of the participating employers in the VRS Teacher Retirement Plan net pension liability would be if it were calculated using a discount rate that is one percentage point lower 5.75% or one percentage point higher 7.75% than the current rate (amounts expressed in thousands):

Net Pension Liability - 1.00% Decrease (5.75%)	\$	19,812,371
Net Pension Liability - Current Discount Rate (6.75%)	\$	13,160,567
Net Pension Liability - 1.00% Increase (7.75%)	\$	7,660,756

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, 2019. The average remaining service lives of all employees provided with pensions through the VRS Teacher Retirement Plan at June 30, 2019, was 5.44 years. Deferred outflows of resources related to pensions resulting from the school division's contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the financial statements for the year ended June 30, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows (amounts expressed in thousands):

Measurement Period Ending June 30, 2020	\$	(2,749)
Measurement Period Ending June 30, 2021	\$	(259,216)
Measurement Period Ending June 30, 2022	\$	111,132
Measurement Period Ending June 30, 2023	\$	217,370
Measurement Period Ending June 30, 2024	\$	104,969

Note 5. Employer Contributions

Employers' proportionate shares were calculated on the basis of historical employer contributions. Although GASB Statement No. 68 encourages the use of the employer's projected long-term contribution effort to the retirement plan, allocating on the basis of historical employer contributions is considered acceptable. Employer contributions recognized by the VRS Teacher Retirement Plan 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 toward the purchase of employee service, contributions for adjustments for prior periods, and supplemental employer contributions from certain employers.

The employer contributions used in the determination of employers' proportionate shares of collective pension 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 payroll for FY 2019. This total was \$1,315,160,450. Of this amount, \$33,622,307 was transferred to ICMA-RC as the employer cost of the defined contribution component for employees covered by the Hybrid Retirement Plan benefit structure and \$1,281,538,143 was retained by the defined benefit plan. The employer contributions of \$1,280,964,000 reported in the VRS Teacher Employee's Retirement Plan's Statement of Changes in Net Position (per the System's separately issued financial statements) reflects this net amount minus approximately \$574,143 in other employer contribution adjustments that were not representative of future contribution efforts.

Note 6. Additional Financial and Actuarial Information

Information contained in the VRS Teacher Retirement Plan Notes to the Schedule of Employer Allocations and Schedule of Pension Amounts by Employer (Schedules) was extracted from the audited financial statements of the Virginia Retirement System for the fiscal year ended June 30, 2019. Additional financial information supporting the preparation of the VRS Teacher Retirement Plan Schedules (including the Financial statements and the unmodified audit opinion thereon, and required supplementary information) is presented in the separately issued VRS 2019 *Comprehensive Annual Financial Report* (CAFR). A copy of the 2019 VRS CAFR is publicly available through the About VRS link on the VRS website at varetire.org, or a copy may be obtained by submitting a request to the VRS Chief Financial Officer, P.O. Box 2500, Richmond, VA 23218-2500.