Sample Notes to the Financial Statements
Cost-Sharing Employer Plans – VRS State Employee Retirement Plan
And VaLORS Retirement Plan
For the Fiscal Year Ended June 30, 2017

Instructions *– The Sample Notes to the Financial Statements for the Cost-Sharing Employer Plans – VRS State Employee and VaLORS Retirement Plans are based on the data in Illustration 3 of GASB Statement No. 68 and the related information in the Implementation Guide. These are provided by the Virginia Retirement System as a guide for employers in the development of their GASB 68 note disclosures.* ***.*** *Additional or substitute language for state agencies with VaLORS Retirement Plan members is shaded in grey.* ***State agencies without VaLORS covered employees should not include the VaLORS Retirement Plan data in their disclosures****. The GASB 68 schedules referenced in this document can be found in the "GASB Statement No. 68 Report for the Virginia Retirement System Prepared as of June 30, 2016" on the VRS Guidelines and Resources page of the VRS website at:*

http://www.varetire.org/employers/financial-reporting/vrs-guidelines-and-resources.asp

Within the sample Notes to the Financial Statements, the sample Required Supplementary Information and the sample Journal Entries there are a number of variable items which each employer must fill in using their own unique information. For each of these items, we have identified the source of the information.

We have also provided an analysis of the change in Net Pension Liability. This analysis includes the June 30, 2015Net Pension Liability and elements impacting the 2016 Net Change in Pension Liability and the June 30, 2016 Net Pension Liability. Most of this data is also contained in the GASB 68 Report from the VRS actuary.

The information for FY 2016 also reflects the transfer of $162,406,273 for state agencies and $16,491,559 for VaLORS agencies as an accelerated payback of the deferred contributions in the 2010-12 biennium. The transfer of funds was from the Commonwealth of Virginia. Agencies will record a proportionate share of this transfer these transfers as a revenue item and as part of pension expense for FY 2016.

The information included in this document reflects the early implementation of GASB Statement No. 82 by the plan. The early implementation resolved two outstanding issues from GASB Statement No. 68 – the Presentation of Payroll Related Measures in RSI and the Classification of Employer-paid Member Contributions. Employers should include information in the Notes to Financial Statements indicating the early implementation of this Standard.

The information in this document is provided as an additional resource for employers, but each employer is responsible for their own Notes to the Financial Statements. Employers should review the language and other information provided with their auditors.

If you have any questions concerning this information, please contact me at (804) 344-3128 or send me an email at bfaison@varetire.org.

State Agency Name
Notes to the Financial Statements
For the Year Ended June 30, 2017

Summary of Significant Accounting Policies

Pensions

The Virginia Retirement System (VRS) State Employee Retirement Plan and the Virginia Law Officers' System (VaLORS) Retirement Plan are single employer pension plans that are treated like cost-sharing plans. 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) State Employee Retirement Plan and the Virginia Law Officers' System (VaLORS) Retirement Plan; and the additions to/deductions from the VRS State Employee Retirement Plan's and the VaLORS 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.

General Information about the Pension Plan

Plan Description

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

The System administers three different benefit structures for covered employees in the VRS State Employee Retirement Plan – Plan 1, Plan 2, and, Hybrid and two different benefit structures for covered employees in the VaLORS Retirement Plan – Plan 1 and Plan 2. 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**

About Plan 1 Plan 1 is a defined benefit plan. The retirement benefit is based on a member's age, creditable service and average final compensation at retirement using a formula. Employees are eligible for Plan 1 if their membership date is before July 1, 2010, and they were vested as of January 1, 2013.	**About Plan 2** Plan 2 is a defined benefit plan. The retirement benefit is based on a member's age, creditable service and average final compensation at retirement using a formula. Employees are eligible for Plan 2 if their membership date is on or after July 1, 2010, or their membership date is before July 1, 2010, and they were not vested as of January 1, 2013.	**About the Hybrid Retirement Plan** The Hybrid Retirement Plan combines the features of a defined benefit plan and a defined contribution plan. Most members hired on or after January 1, 2014 are in this plan, as well as Plan 1 and Plan 2 members who were eligible and opted into the plan during a special election window. (see "Eligible Members") • The defined benefit is based on a member's age, creditable service and average final compensation at retirement using a formula. • The benefit from the defined contribution component of the plan depends on the member and employer contributions made to the plan and the investment performance of those contributions. • In addition to the monthly benefit payment payable from the defined benefit plan at retirement, a member may start receiving distributions from the balance in the defined contribution account, reflecting the contributions, investment gains or losses, and any required fees.
Eligible Members Employees are in Plan 1 if their membership date is before July 1, 2010, and they were vested as of January 1, 2013.	**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.	**Eligible Members** Employees are in the Hybrid Retirement Plan if their membership date is on or after January 1, 2014. This includes: • State employees*

Hybrid Opt-In Election VRS non-hazardous duty covered Plan 1 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014. The Hybrid Retirement Plan's effective date for eligible Plan 1 members who opted in was July 1, 2014. If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement Plan. Members who were eligible for an optional retirement plan (ORP) and had prior service under Plan 1 were not eligible to elect the Hybrid Retirement Plan and remain as Plan 1 or ORP.	**Hybrid Opt-In Election** Eligible Plan 2 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014. The Hybrid Retirement Plan's effective date for eligible Plan 2 members who opted in was July 1, 2014. If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement Plan. Members who were eligible for an optional retirement plan (ORP) and have prior service under Plan 2 were not eligible to elect the Hybrid Retirement Plan and remain as Plan 2 or ORP.	• Members in Plan 1 or Plan 2 who elected to opt into the plan during the election window held January 1-April 30, 2014; the plan's effective date for opt-in members was July 1, 2014 ***Non-Eligible Members** Some employees are not eligible to participate in the Hybrid Retirement Plan. They include: • Members of the Virginia Law Officers' Retirement System (VaLORS) Those employees eligible for an optional retirement plan (ORP) must elect the ORP plan or the Hybrid Retirement Plan. If these members have prior service under Plan 1 or Plan 2, they are not eligible to elect the Hybrid Retirement Plan and must select Plan 1 or Plan 2 (as applicable) or ORP.
Retirement Contributions State employees, excluding state elected officials, and optional retirement plan participants, contribute 5% of their compensation each month to their member contribution account through a pre-tax salary reduction. Member contributions are tax-deferred until they are withdrawn as part of a retirement benefit or as a refund. The employer makes a separate actuarially determined contribution to VRS for all covered employees. VRS invests both member and employer	**Retirement Contributions** State employees contribute 5% of their compensation each month to their member contribution account through a pre-tax salary reduction.	**Retirement Contributions** A member's retirement benefit is funded through mandatory and voluntary contributions made by the member and the employer to both the defined benefit and the defined contribution components of the plan. Mandatory contributions are based on a percentage of the employee's creditable compensation and are required from both the member and the employer. Additionally, members may choose to make voluntary contributions to the defined

contributions to provide funding for the future benefit payment.		contribution component of the plan, and the employer is required to match those voluntary contributions according to specified percentages.
Creditable Service Creditable service includes active service. Members earn creditable service for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional creditable service the member was granted. A member's total creditable service is one of the factors used to determine their eligibility for retirement and to calculate their retirement benefit. It also may count toward eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit.	**Creditable Service** Same as Plan 1.	**Creditable Service** **<u>Defined Benefit Component:</u>** Under the defined benefit component of the plan, creditable service includes active service. Members earn creditable service for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional creditable service the member was granted. A member's total creditable service is one of the factors used to determine their eligibility for retirement and to calculate their retirement benefit. It also may count toward eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit. **<u>Defined Contributions Component:</u>** Under the defined contribution component, creditable service is used to determine vesting for the employer contribution portion of the plan.
Vesting Vesting is the minimum length of service a member needs to qualify for a future retirement benefit. Members become vested when they have at least	**Vesting** Same as Plan 1.	**Vesting** **<u>Defined Benefit Component:</u>** Defined benefit vesting is the minimum length of service a member needs to qualify for a future retirement benefit.

five years (60 months) of creditable service. Vesting means members are eligible to qualify for retirement if they meet the age and service requirements for their plan. Members also must be vested to receive a full refund of their member contribution account balance if they leave employment and request a refund. Members are always 100% vested in the contributions that they make.		Members are vested under the defined benefit component of the Hybrid Retirement Plan when they reach five years (60 months) of creditable service. Plan 1 or Plan 2 members with at least five years (60 months) of creditable service who opted into the Hybrid Retirement Plan remain vested in the defined benefit component. **<u>Defined Contributions Component:</u>** Defined contribution vesting refers to the minimum length of service a member needs to be eligible to withdraw the employer contributions from the defined contribution component of the plan. Members are always 100% vested in the contributions that they make. Upon retirement or leaving covered employment, a member is eligible to withdraw a percentage of employer contributions to the defined contribution component of the plan, based on service. • After two years, a member is 50% vested and may withdraw 50% of employer contributions. • After three years, a member is 75% vested and may withdraw 75% of employer contributions. • After four or more years, a member is 100% vested and may withdraw 100% of employer contributions. Distribution is not required by law until age 70½.

Calculating the Benefit The Basic Benefit is calculated based on a formula using the member's average final compensation, a retirement multiplier and total service credit at retirement. It is one of the benefit payout options available to a member at retirement. An early retirement reduction factor is applied to the Basic Benefit if the member retires with a reduced retirement benefit or selects a benefit payout option other than the Basic Benefit.	**Calculating the Benefit** See definition under Plan 1.	**Calculating the Benefit** **Defined Benefit Component:** See definition under Plan 1 **Defined Contribution Component:** The benefit is based on contributions made by the member and any matching contributions made by the employer, plus net investment earnings on those contributions.
Average Final Compensation A member's average final compensation is the average of the 36 consecutive months of highest compensation as a covered employee.	**Average Final Compensation** A member's average final compensation is the average of their 60 consecutive months of highest compensation as a covered employee.	**Average Final Compensation** Same as Plan 2. It is used in the retirement formula for the defined benefit component of the plan.
Service Retirement Multiplier **VRS:** The retirement multiplier is a factor used in the formula to determine a final retirement benefit. The retirement multiplier for non-hazardous duty members is 1.70%. **VaLORS:** The retirement multiplier for VaLORS employees is 1.70% or 2.00%.	**Service Retirement Multiplier** **VRS:** Same as Plan 1 for service earned, purchased or granted prior to January 1, 2013. For non-hazardous duty members the retirement multiplier is 1.65% for creditable service earned, purchased or granted on or after January 1, 2013. **VaLORS:** The retirement multiplier for VaLORS employees is 2.00%.	**Service Retirement Multiplier** **Defined Benefit Component:** **VRS:** The retirement multiplier for the defined benefit component is 1.00%. For members who opted into the Hybrid Retirement Plan from Plan 1 or Plan 2, the applicable multipliers for those plans will be used to calculate the retirement benefit for service credited in those plans. **VaLORS:** Not applicable.

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

  VaLORS: 50 with at least five years of creditable service.	 **VaLORS:** Same as Plan 1.	years (60 months) of creditable service. **VaLORS:** Not applicable. **Defined Contribution Component:** Members are eligible to receive distributions upon leaving employment, subject to restrictions.
Cost-of-Living Adjustment (COLA) in Retirement The Cost-of-Living Adjustment (COLA) matches the first 3% increase in the Consumer Price Index for all Urban Consumers (CPI-U) and half of any additional increase (up to 4%) up to a maximum COLA of 5%. **Eligibility:** For members who retire with an unreduced benefit or with a reduced benefit with at least 20 years of creditable service, the COLA will go into effect on July 1 after one full calendar year from the retirement date. For members who retire with a reduced benefit and who have less than 20 years of creditable service, the COLA will go into effect on July 1 after one calendar year following the unreduced retirement eligibility date. **Exceptions to COLA Effective Dates:** The COLA is effective July 1 following one full calendar year (January 1 to December 31)	**Cost-of-Living Adjustment (COLA) in Retirement** The Cost-of-Living Adjustment (COLA) matches the first 2% increase in the CPI-U and half of any additional increase (up to 2%), for a maximum COLA of 3%. **Eligibility:** Same as Plan 1 **Exceptions to COLA Effective Dates:** Same as Plan 1	**Cost-of-Living Adjustment (COLA) in Retirement** **Defined Benefit Component:** Same as Plan 2. **Defined Contribution Component:** Not applicable. **Eligibility:** Same as Plan 1 and Plan 2. **Exceptions to COLA Effective Dates:** Same as Plan 1 and Plan 2.

under any of the following circumstances: • The member is within five years of qualifying for an unreduced retirement benefit as of January 1, 2013. • The member retires on disability. • The member retires directly from short-term or long-term disability under the Virginia Sickness and Disability Program (VSDP). • The member Is involuntarily separated from employment for causes other than job performance or misconduct and is eligible to retire under the Workforce Transition Act or the Transitional Benefits Program. • The member dies in service and the member's survivor or beneficiary is eligible for a monthly death-in-service benefit. The COLA will go into effect on July 1 following one full calendar year (January 1 to December 31) from the date the monthly benefit begins.		
Disability Coverage Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.7% on all service, regardless of when it was earned, purchased or granted. Most state employees are covered under the Virginia Sickness and Disability Program	**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. Most state employees are covered under the Virginia Sickness and Disability Program	**Disability Coverage** State employees (including Plan 1 and Plan 2 opt-ins) participating in the Hybrid Retirement Plan are covered under the Virginia Sickness and Disability Program (VSDP), and are not eligible for disability retirement. Hybrid members (including Plan 1 and Plan 2 opt-ins) covered under VSDP are

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

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 state agencies by the Virginia General Assembly. Employees are required to contribute 5.00% of their compensation toward their retirement. Prior to July 1, 2012, the 5.00% member contribution was paid by the employer. Beginning July 1, 2012 state employees were required to pay the 5.00% member contribution and the employer was required to provide a salary increase equal to the amount of the increase in the employee-paid member contribution. Each state agency's contractually required contribution rate for the year ended June 30, 2017 was 13.49% of covered employee compensation for employees in the VRS State Employee Retirement Plan. For employees in the VaLORS Retirement Plan, the contribution rate was 21.05% of covered employee compensation. This rate was/These rates were based on an actuarially determined rate(s) from an actuarial valuation as of June 30, 2015. The contribution rate for the VRS State Employee Retirement Plan also reflects the transfer in June 2016 of $162,406,273 as an accelerated payback of the deferred contribution in the 2010-12 biennium. The contribution rate for the VaLORS Retirement Plan also reflects the transfer in June 2016 of $16,491,559 as an accelerated payback of the deferred contribution in the 2010-12 biennium. 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. Contributions from the state agency to the VRS State Employee Retirement Plan were $ [Insert amount] and $ [Insert amount] for the years ended June 30, 2017 and June 30, 2016, respectively. Contributions from the state agency to the VaLORS Retirement Plan were $ [Insert amount] and $ [Insert amount] for the years ended June 30, 2017 and June 30, 2016, respectively.

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

At June 30, 2017, the state agency reported a liability of $ [Schedule D – Net Pension Liability – State Employers, 6/30/2016 Net Pension Liability] for its proportionate share of the VRS State Employee Retirement Plan Net Pension Liability and a liability of $ [Schedule D – Net Pension Liability – VaLORS Employers, 6/30/2016 Net Pension Liability] for its proportionate share of the VaLORS Retirement Plan Net Pension Liability. The Net Pension Liability was measured as of June 30, 2016 and the total pension liability used to calculate the Net Pension Liability was determined by an actuarial valuation as of that date. The state agency's proportion of the Net Pension Liability was based on the state agency's actuarially determined employer contributions to the pension plan for the year ended June 30, 2016 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2016, the state agency's proportion of the VRS State Employee Retirement Plan was [Schedule A – Proportionate Share of Contributions – State Employers, 2016 Employer Allocation Percentage] % as compared to [Schedule A – Proportionate Share of Contributions – State Employers, 2015 Employer Allocation Percentage] % at June 30, 2015. At June 30, 2016, the state agency's proportion of the VaLORS Retirement Plan was [Schedule A – Proportionate Share of Contributions – VaLORS Employers, 2016 Employer Allocation Percentage] % as compared to [Schedule A – Proportionate Share of Contributions – VaLORS Employers, 2015 Employer Allocation Percentage] % at June 30, 2015.

For the year ended June 30, 2017, the state agency recognized pension expense of $ [Schedule B – Deferred Inflows and Outflows and Pension Expense – State Employers, Total Employer Pension Expense] for the VRS State Employee Retirement Plan and $ [Schedule B – Deferred Inflows and Outflows and Pension Expense – VaLORS Employers, Total Employer Pension Expense] for the VaLORS Retirement Plan. Since there was a change in proportionate share between June 30, 2015 and June 30, 2016, a portion of the pension expense was related to deferred amounts from changes in proportion and from differences between employer contributions and the proportionate share of employer contributions.

At June 30, 2017, the state agency reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	1	5
Net difference between projected and actual earnings on pension plan investments	2	6
Change in assumptions	3	7
Changes in proportion and differences between Employer contributions and proportionate share of contributions	4	8
Employer contributions subsequent to the measurement date	[Insert amount]	-
Total	$ -	$ -

Source of Data for Deferred Outflows and Deferred Inflows Schedule:

Schedule B – Schedule of Deferred Inflows and Outflows and Pension Expense – State Employers

1 – $ [Deferred Outflows of Resources - Difference Between Expected and Actual Exp.]
2 – $ [Deferred Outflows of Resources - Net Difference Between Projected and Actual Inv…]
3 – $ [Deferred Outflows of Resources - Change of Assumptions.]
4 – $ [Deferred Outflows of Resources - Changes in Proportion and Differences....]
5 – $ [Deferred Inflows of Resources - Difference Between Expected and Actual Exp.]
6 – $ [Deferred Inflows of Resources - Net Difference Between Projected and Actual Inv…]
7 – $ [Deferred Inflows of Resources - Change of Assumptions.]
8 – $ [Deferred Inflows of Resources - Changes in Proportion and Differences....]

For employers with VaLORS Plans, the data for this schedule will be found on Schedule B – Schedule of Deferred Inflows and Outflows and Pension Expense – VaLORS Employers.

$[Insert amount] reported as deferred outflows of resources related to pensions resulting from the state agency’s contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the Fiscal Year ending June 30, 2018. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in future reporting periods as follows:

Year ended June 30

FY 2018	$ [Schedule C, Year 1]
FY 2019	$ [Schedule C, Year 2]
FY 2020	$ [Schedule C, Year 3]
FY 2021	$ [Schedule C, Year 4]
FY 2022	$ [Schedule C, Year 5]

Source of Data for Amortization of Deferred Outflows and Deferred Inflows Schedule: Schedule C – Amortization of Deferred Inflows and Outflows – State Employers

For employers with VaLORS Plans, the data for this schedule will be found on Schedule C – Amortization of Deferred Inflows and Outflows – VaLORS Employers.

Actuarial Assumptions

The total pension liability for the VRS State Employee Retirement Plan was based on an actuarial valuation as of June 30, 2015, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2016.

Inflation	2.5 percent
Salary increases, including Inflation	3.5 percent – 5.35 percent
Investment rate of return	7.0 percent, net of pension plan investment expense, including inflation*

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

Mortality rates:

Pre-Retirement:
RP-2000 Employee Mortality Table Projected with Scale AA to 2020 with males set forward 2 years and females were set back 3 years.

Post-Retirement:
RP-2000 Combined Mortality Table Projected with Scale AA to 2020 with females set back 1 year.

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

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

- Update mortality table
- Decrease in rates of service retirement
- Decrease in rates of withdrawals for less than 10 years of service
- Decrease in rates of male disability retirement
- Reduce rates of salary increase by 0.25% per year

The total pension liability for the VaLORS Retirement Plan was based on an actuarial valuation as of June 30, 2015, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2016.

Inflation	2.5 percent
Salary increases, including Inflation	3.5 percent – 4.75 percent
Investment rate of return	7.0 percent, net of pension plan investment expense, including inflation*

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

Mortality rates:

Pre-Retirement:
RP-2000 Employee Mortality Table Projected with Scale AA to 2020 with males set forward 5 years and females were set back 3 years.

Post-Retirement:
RP-2000 Combined Mortality Table Projected with Scale AA to 2020 with females set back 1 year.

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

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

- Update mortality table
- Adjustments to the rates of service retirement
- Decrease in rates of withdrawals for females under 10 years of service
- Increase in rates of disability
- Decrease service related disability rate from 60% to 50%

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, 2016, NPL amounts for the VRS State Employee Retirement Plan and the VaLORS Retirement Plan are as follows (amounts expressed in thousands):

	State Employee Retirement Plan	**VaLORS Retirement Plan**
Total Pension Liability	$ 22,958,593	$ 1,985,618
Plan Fiduciary Net Position	16,367,842	1,211,446
Employers' Net Pension Liability (Asset)	$ 6,590,751	$ 774,172
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	71.29%	61.01%

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.

Long-Term Expected Rate of Return

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

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

* Using stochastic projection results provides an expected range of real rates of return over various time horizons. Looking at one year results produces an expected real return of 8.33% but also has a high standard deviation, which means there is high volatility. Over larger time horizons the

volatility declines significantly and provides a median return of 7.44%, including expected inflation of 2.50%.

Discount Rate

The discount rate used to measure the total pension liability was 7.00%. The projection of cash flows used to determine the discount rate assumed that System member contributions will be made per the VRS Statutes and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Through the fiscal year ending June 30, 2018, the rate contributed by the state agency for the VRS State Employee Retirement Plan and the VaLORS Retirement Plan will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly. From July 1, 2018 on, all agencies are assumed to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total pension liability.

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

The following presents the state agency's proportionate share of the VRS State Employee Retirement Plan net pension liability using the discount rate of 7.00%, as well as what the state agency's proportionate share of the net pension liability would be if it were calculated using a discount rate that is one percentage point lower (6.00%) or one percentage point higher (8.00%) than the current rate:

	1.00% Decrease (6.00%)	Current Discount Rate (7.00%)	1.00% Increase (8.00%)
State agency's proportionate share of the VRS State Employee Retirement Plan Net Pension Liability	$ [Schedule D – Net Pension Liability – State Employers, Net Pension Liability 1% Decrease (6.0%)]	$ [Schedule D – Net Pension Liability – State Employers, 6/30/2016 Net Pension Liability]	$ [Schedule D – Net Pension Liability – State Employers, Net Pension Liability 1% Increase (8.0%)]

The following presents the state agency's proportionate share of the VaLORS Retirement Plan net pension liability using the discount rate of 7.00%, as well as what the state agency's proportionate share of the net pension liability would be if it were calculated using a discount rate that is one percentage point lower (6.00%) or one percentage point higher (8.00%) than the current rate:

	1.00% Decrease (6.00%)	Current Discount Rate (7.00%)	1.00% Increase (8.00%)
State agency's proportionate share of the VaLORS VaLORS Retirement Plan Net Pension Liability	$ [Schedule D – Net Pension Liability – VaLORS Employers, Net Pension Liability 1% Decrease (6.0%)]	$ [Schedule D – Net Pension Liability – VaLORS Employers, 6/30/2016 Net Pension Liability]	$ [Schedule D – Net Pension Liability – VaLORS Employers, Net Pension Liability 1% Increase (8.0%)]

Pension Plan Fiduciary Net Position

Detailed information about the VRS State Employee Retirement Plan's Fiduciary Net Position or the VaLORS Retirement Plan's Fiduciary Net Position is available in the separately issued VRS 2015 Comprehensive Annual Financial Report (CAFR). A copy of the 2016 VRS CAFR may be downloaded from the VRS website at http://www.varetire.org/Pdf/Publications/2016-annual-report.pdf, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

Payables to the Pension Plan

[If the state agency reported payables to the VRS, it should disclose information required by paragraph 122 of GASB 68. It is the state agency's responsibility to calculate this amount and complete the required disclosure.]

Required Supplementary Information (RSI) Template
Cost-Sharing Employer Plans – VRS State Employee Retirement Plan
And VaLORS Retirement Plan
For the Fiscal Year Ended June 30, 2017

Instructions *– This template includes two sample schedules and the language for Notes to RSI to be used as a guide in the development of the RSI section of your financial statements:*

- *Schedule of Employer's Share of Net Pension Liability*
- *Schedule of Employer Contributions*
- *Notes to Required Supplementary Information*

The sample schedules presented in this section will each eventually show a 10-year history of data related to GASB 68. You may create your own tables based on the examples VRS has provided. Each year, VRS will update the data highlighted in accordance with the legend. However, the employer is responsible for providing the remainder of the information and calculation as indicated.

Each employer is responsible for maintaining its own schedules, retaining prior year data, and updating the schedules each year based on the new information.

Note: The definition in GASB 68 for Covered Employee Payroll included the total payroll for employees covered under the pension plan whether that payroll is subject to pension coverage or not. This definition has been modified in GASB Statement No. 82 and now is the payroll on which contributions to a pension plan are based. The ratios that are presented use the same measure.

- ***Employer's Covered Payroll referenced in the GASB 68 schedules in the template represent the total pensionable payroll for employees covered under the pension plan. Both of these schedules will now have multiple years of data. The periods for the additions to the schedules for FY 2017 are as follows:***

    - ***Schedule of Employer's Share of Net Pension Liability for the Year Ended June 30, 2016 – Covered Payroll is for the measurement period of July 1, 2015 through June 30, 2016. This schedule will now have two years.***

    - ***Schedule of Employer Contributions – Covered Payroll is for the fiscal year ended June 30, 2017. This schedule should have ten years. Pre-GASB Statement No. 68 information can be taken from the RSI data previously required under GASB Statement No. 27.***

Sample Schedule of Employer's Share of Net Pension Liability

Schedule of Employer's Share of Net Pension Liability
VRS State Employee Retirement Plan
For the Years Ended June 30, 2017, 2016 and 2015*

	2017	2016	2015
Employer's Proportion of the Net Pension Liability (Asset)	[Schedule A - Proportionate Share of Contributions - State Employers, 2016 Employer Allocation Percentage] %	[Schedule A - Proportionate Share of Contributions - State Employers, 2015 Employer Allocation Percentage] %	[Schedule A - Proportionate Share of Contributions - State Employers, 2014 Employer Allocation Percentage] %
Employer's Proportionate Share of the Net Pension Liability (Asset)	$ [Schedule D - Net Pension Liability - State Employers, 6/30/2016 Net Pension Liability]	$ [Schedule D - Net Pension Liability - State Employers, 6/30/2015 Net Pension Liability]	$ [Schedule D - Net Pension Liability - State Employers, 6/30/2014 Net Pension Liability]
Employer's Covered Payroll	$ [Inset Amount]	$ [Inset Amount]	$ [Inset Amount]
Employer's Proportionate Share of the Net Pension Liability (Asset) as a Percentage of its Covered Payroll	[Calculation: Line 2 divided by Line 3] %	[Calculation: Line 2 divided by Line 3] %	[Calculation: Line 2 divided by Line 3] %
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	71.29%	72.81%	74.28%

Schedule is intended to show information for 10 years. Since 2017 is the third year for this presentation, only one additional year of data is available. However, additional years will be included as they become available.

* The amounts presented have a measurement date of the previous fiscal year end.

For Reference Only: The Plan Fiduciary Net Position as a Percentage of the Total Pension Liability for the VRS State Employee Retirement Plan for each year is presented on page 113 of the VRS 2016 Comprehensive Annual Financial Report (CAFR).

Sample Schedule of Employer's Share of Net Pension Liability

Schedule of Employer's Share of Net Pension Liability
VaLORS Retirement Plan
For the Years Ended June 30, 2017, 2016 and 2015*

	2017	2016	2015
Employer's Proportion of the Net Pension Liability (Asset)	[Schedule A - Proportionate Share of Contributions - VaLORS Employers, 2016 Employer Allocation Percentage] %	[Schedule A - Proportionate Share of Contributions - VaLORS Employers, 2015 Employer Allocation Percentage] %	[Schedule A - Proportionate Share of Contributions - VaLORS Employers, 2014 Employer Allocation Percentage] %
Employer's Proportionate Share of the Net Pension Liability (Asset)	$ [Schedule D - Net Pension Liability - VaLORS Employers, 6/30/2016 Net Pension Liability]	$ [Schedule D - Net Pension Liability - VaLORS Employers, 6/30/2015 Net Pension Liability]	$ [Schedule D - Net Pension Liability - VaLORS Employers, 6/30/2014 Net Pension Liability]
Employer's Covered Payroll	$ [Inset Amount]	$ [Inset Amount]	$ [Inset Amount]
Employer's Proportionate Share of the Net Pension Liability (Asset) as a Percentage of its Covered Payroll	[Calculation: Line 2 divided by Line 3] %	[Calculation: Line 2 divided by Line 3] %	[Calculation: Line 2 divided by Line 3] %
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	61.01%	62.64%	63.05%

Schedule is intended to show information for 10 years. Since 2017 is thethird year for this presentation, only one additional year of data is available. However, additional years will be included as they become available.

* The amounts presented have a measurement date of the previous fiscal year end.

For Reference Only: The Plan Fiduciary Net Position as a Percentage of the Total Pension Liability for the VaLORS Retirement Plan for each year is presented on page 115 of the VRS 2016 Comprehensive Annual Financial Report (CAFR).

Sample Schedule of Employer Contributions

Schedule of Employer Contributions
VRS State Employee Retirement Plan
For the Years Ended June 30, 2008 through 2017

Date	Contractually Required Contribution (1)	Contributions in Relation to Contractually Required Contribution (2)	Contribution Deficiency (Excess) (3)	Employer's Covered Payroll (4)	Contributions as a % of Covered Payroll (5)
2017	$ [Insert Amount]	$ [Insert Amount]	Col (1) - (2)	$ [Insert Amount]	Col (2) / (4)
2016	$ [Insert Amount]	$ [Insert Amount]	Col (1) - (2)	$ [Insert Amount]	Col (2) / (4)
2015	$ [Insert Amount]	$ [Insert Amount]	Col (1) - (2)	$ [Insert Amount]	Col (2) / (4)
2014	$ [Insert Amount]	$ [Insert Amount]	Col (1) - (2)	$ [Insert Amount]	Col (2) / (4)
2013	$ [Insert Amount]	$ [Insert Amount]	Col (1) - (2)	$ [Insert Amount]	Col (2) / (4)
2012	$ [Insert Amount]	$ [Insert Amount]	Col (1) - (2)	$ [Insert Amount]	Col (2) / (4)
2011	$ [Insert Amount]	$ [Insert Amount]	Col (1) - (2)	$ [Insert Amount]	Col (2) / (4)
2010	$ [Insert Amount]	$ [Insert Amount]	Col (1) - (2)	$ [Insert Amount]	Col (2) / (4)
2009	$ [Insert Amount]	$ [Insert Amount]	Col (1) - (2)	$ [Insert Amount]	Col (2) / (4)
2008	$ [Insert Amount]	$ [Insert Amount]	Col (1) - (2)	$ [Insert Amount]	Col (2) / (4)

For Reference Only:
Column 1 – Employer contribution rate multiplied by the employer's covered payroll
Column 2 – Actual employer contribution remitted to VRS
Column 4 – Employer's covered payroll amount for the fiscal year.

Sample Schedule of Employer Contributions

Schedule of Employer Contributions
VaLORS Retirement Plan
For the Years Ended June 30, 2008 through 2017

Date	Contractually Required Contribution (1)	Contributions in Relation to Contractually Required Contribution (2)	Contribution Deficiency (Excess) (3)	Employer's Covered Payroll (4)	Contributions as a % of Covered Payroll (5)
2017	$ [Insert Amount]	$ [Insert Amount]	Col (1) - (2)	$ [Insert Amount]	Col (2) / (4)
2016	$ [Insert Amount]	$ [Insert Amount]	Col (1) - (2)	$ [Insert Amount]	Col (2) / (4)
2015	$ [Insert Amount]	$ [Insert Amount]	Col (1) - (2)	$ [Insert Amount]	Col (2) / (4)
2014	$ [Insert Amount]	$ [Insert Amount]	Col (1) - (2)	$ [Insert Amount]	Col (2) / (4)
2013	$ [Insert Amount]	$ [Insert Amount]	Col (1) - (2)	$ [Insert Amount]	Col (2) / (4)
2012	$ [Insert Amount]	$ [Insert Amount]	Col (1) - (2)	$ [Insert Amount]	Col (2) / (4)
2011	$ [Insert Amount]	$ [Insert Amount]	Col (1) - (2)	$ [Insert Amount]	Col (2) / (4)
2010	$ [Insert Amount]	$ [Insert Amount]	Col (1) - (2)	$ [Insert Amount]	Col (2) / (4)
2009	$ [Insert Amount]	$ [Insert Amount]	Col (1) - (2)	$ [Insert Amount]	Col (2) / (4)
2008	$ [Insert Amount]	$ [Insert Amount]	Col (1) - (2)	$ [Insert Amount]	Col (2) / (4)

For Reference Only:
Column 1 – Employer contribution rate multiplied by the employer’s covered payroll
Column 2 – Actual employer contribution remitted to VRS
Column 4 – Employer’s covered payroll amount for the fiscal year.

Sample Notes to Required Supplementary Information

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

Changes of benefit terms – There have been no actuarially material changes to the System benefit provisions since the prior actuarial valuation. The 2014 valuation includes Hybrid Retirement Plan members for the first time. The hybrid plan applies to most new employees hired on or after January 1, 2014 and not covered by enhanced hazardous duty benefits. Because this is still a fairly new benefit and the number of participants was relatively small, the impact on the liabilities as of the measurement date of June 30, 2016 are not material.

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

- Update mortality table
- Decrease in rates of service retirement
- Decrease in rates of withdrawals for less than 10 years of service
- Decrease in rates of male disability retirement
- Reduce rates of salary increase by 0.25% per year

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

- Update mortality table
- Adjustments to the rates of service retirement
- Decrease in rates of withdrawals for females under 10 years of service
- Increase in rates of disability
- Decrease service related disability rate from 60% to 50%