Virginia Lottery

2018 VIRGINIA LOTTERY // ANNUAL FINANCIAL REPORT

for year ended June 30, 2018

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Management's Discussion and Analysis

(unaudited)

The Virginia Lottery's Management's Discussion and Analysis (MD&A) is designed to assist the reader in focusing on significant financial issues and provides an overview of financial activity. All Virginia Lottery net income is transferred to the Commonwealth of Virginia (Commonwealth) each year in accordance with requirements in the Appropriations Act and the Code of Virginia. Therefore, the Virginia Lottery's MD&A focuses primarily on an overview of the financial results of operations. Please read it in conjunction with the accompanying financial statements.

Financial Highlights

Virginia Lottery ticket sales totaled $2,139.8 million for fiscal year 2018, the highest total ever for Virginia Lottery sales. Net proceeds totaling $606.2 million were earned for the Lottery Proceeds Fund, all of which are constitutionally mandated to support local public education. Highlights of the fiscal year include:

- **Sales decreased by $149.9 million (7.5 percent) from last year to $2,139.8 million.**
- **Net income was $606.2 million, a increase of $47.9 million.**
- **Prize expense increased $93.4 million (7.7 percent) to a record total of $1,307.7 million.**
- **With the sales increase, retailers earned $9.3 million (8.3 percent) more than last year, with compensation paid to retailers totaling $121.3 million. Retailers earned, on average, 5.7 cents on each dollar sold, slightly higher than last year.**

Overview of the Financial Statements

The activities of the Virginia Lottery are accounted for in an enterprise fund, used to account for governmental operations that are financed and operated in a manner similar to private business enterprises. Enterprise fund accounting is used when the governing body has decided that periodic determination of revenues earned, expenses incurred, and net income is appropriate. The basis of accounting is an accrual basis where revenues are recognized when earned and expenses when incurred, regardless of when cash is exchanged.

This annual report consists of a series of financial statements, along with explanatory notes to the financial statements. The report includes the Statement of Net Position; the Statement of Revenues, Expenses, and Changes in Net Position; and the Statement of Cash Flows. The Statement of Net Position and the Statement of Revenues, Expenses, and Changes in Net Position report the Virginia Lottery's net assets and their changes. By law, the Virginia Lottery transfers all of its net income to the Commonwealth, specifically to the Lottery Proceeds

Fund, each year. As a result, the net assets of the Virginia Lottery consist largely of capital assets (equipment) and U.S. Treasuries held to fund future payments on annuitized lottery prizes as shown in the Statement of Net Position. To assess the Virginia Lottery's financial position and financial health, the reader of these statements should pay particular attention to changes in operating revenues, expenses, and transfers to the Lottery Proceeds Fund as shown in the Statement of Revenues, Expenses, and Changes in Net Position. The Statement of Cash Flows presents information related to cash inflows and outflows summarized by operating capital, financing, and investing activities.

Statement of Net Position

Table 1 reflects the condensed Statement of Net Position compared to the prior year.

TABLE 1: STATEMENT OF NET POSITION

	2018	2017	Change
Assets:			
Current assets	*$153.80*	*$113.87*	*$39.93*
U.S. Treasuries	*105.93*	*111.16*	*(5.23)*
Capital (Fixed) Assets, Net of Accumulated Depreciation	*12.94*	*13.22*	*(0.28)*
Non-Current assets	*0.94*	*0*	*0.94*
Total Assets	*$273.61*	*$238.25*	*($35.36)*
Deferred outflows of resources:			
	$3.85	*$5.78*	*($1.93)*
Liabilities:			
Current Liabilities	*166.2*	*126.46*	*39.74*
Long-term Liabilities	*141.71*	*142.43*	*(0.72)*
Total Liabilities	*$307.91*	*$268.89*	*$39.02*
Deferred inflows of resources:			
	$3.60	*$0.83*	*$2.77*
Net position:			
Net Investment in Capital and OPEB Assets	*13.88*	*13.22*	*0.66*
Unrestricted	*(47.93)*	*(38.90)*	*(9.03)*
Total Net Position	*($34.05)*	*($25.69)*	*($8.36)*

** $ in millions*

Current assets and liabilities increased $39.93 million and $39.74 million respectively due to the change in cash balances on hand and cash held as collateral for Securities Lending. Fiscal year-end 2018 cash was higher due to cash held as Collateral for Securities Lending. In 2018 the Lottery resumed its participation in the Securities Lending Program. Lottery U.S. Treasuries decreased $5.23 million and consist of U.S. Treasury STRIPS purchased to fund individual jackpot and "For Life" prizes, as winners continue to receive their annuity prizes. Winners are electing annuity payment options less frequently, requiring very few purchases of U.S. Treasuries for future prize payments.

In fiscal year 2018, the Lottery implemented Governmental Accounting Standards Board GASB 75, for other postemployment benefits other than pensions. With the change in accounting principle the Lottery's non-current assets increased $943,000 due to the disability program being overfunded. The Lottery's non-current liabilities decreased slightly $720,000 due to reduction in pension liabilities, U.S. Treasuries for our individual jackpot and "For Life" prize winners and compensated absences.

Deferred inflows of resources increased $2.77 million due to the expected increase in investment earnings set aside for future pension and other post-employment retiree benefit liabilities.

The decrease in fixed assets reflects the decrease in purchases of new capital assets in fiscal year 2018 compared to 2017, primarily consisting of equipment to sell products in licensed retailer locations across Virginia.

Since the Virginia Lottery transfers all net income to the Commonwealth each fiscal year, changes in assets do not reflect the results of its operating activities. Those results are discussed later in this document.

TABLE 2: STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

	2018	2017	Change
Sales	*$2,139.82*	*$1,989.87*	*$149.95*
Prizes	*(1,307.70)*	*(1,214.30)*	*(93.40)*
Retailer compensation	*(121.29)*	*(111.96)*	*(9.33)*
Ticket printing and gaming services	*(33.97)*	*(31.31)*	*(2.66)*
Operating expenses	*(71.58)*	*(75.03)*	*3.45*
Income from operations	*605.27*	*557.27*	*48.00*
Non-operating revenue and expenses	*0.95*	*1.04*	*(0.09)*
Net income	*$606.22*	*$558.31*	*$47.91*
Transfers to the Lottery proceeds Fund	*(596.66)*	*(546.49)*	*(50.17)*
Due (To) Lottery Proceeds Fund	*(9.56)*	*(11.82)*	*2.26*
Beginning Net Position	*(25.69)*	*(25.73)*	*0.04*
Change in Pension Liability	*(0.03)*	*0.05*	*(0.08)*
Change in OPEB Liability	*(1.49)*	*0*	*(1.49)*
Net effect of change in accounting principle	*(6.84)*	*0*	*(6.84)*
Ending Net Position	*($34.05)*	*($25.69)*	*($8.36)*

** $ in millions*

Sales

Virginia Lottery products fall into two major categories: scratch games and computer terminal (on-line) games. Scratch games are games in which players scratch off tickets to reveal whether they have won and include $1, $2, $3, $5, $10, $20, and $30 product offerings. Computer terminal games are games for which players buy tickets that are issued by a lottery terminal, for a chance to win prizes either instantly or from a subsequent drawing. Computer terminal games include Pick 3, Pick 4, Cash 5, Mega Millions, Powerball, Print 'n Play, Cash4Life, Bank a Million, and Raffle.

TABLE 3: SALES

	2018	2017	Change
Scratch Sales	*$1,184.64*	*$1,117.71*	*5.99%*
Computer terminal sales:			
Pick 3	*$296.63*	*$276.56*	*7.26%*
Pick 4	*302.73*	*291.85*	*3.73%*
Cash 5	*33.20*	*31.43*	*5.63%*
Print 'n Play	*45.43*	*39.89*	*13.89%*
Raffle	*7.50*	*6.60*	*13.64%*
Bank A Million	*13.28*	*13.46*	*-1.34%*
Cash4Life	*15.24*	*15.31*	*-0.46%*
Powerball	*130.78*	*112.71*	*16.03%*
Mega Millions	*110.39*	*84.35*	*30.87%*
Total Computer Terminal Sales	*$955.18*	*$872.16*	*9.52%*
Total Sales	***$2,139.82***	***$1,989.87***	***7.54%***

** $ in millions*

Table 3 compares sales for each lottery product for fiscal years 2018 and 2017. Total sales revenue for fiscal year 2018 was higher than last year. Scratch, Pick 3, Pick 4, and Print and Play set individual sales records for those products.

Scratch Game sales (55.4 percent of total sales) were higher than fiscal year 2017. Growth in scratch game sales increased due to the continued offering of a variety of games designed to meet player preferences.

Daily Game total sales (Pick 3, Pick 4, and Cash 5) represented 29.6 percent of total product sales for the fiscal year, an increase of $32.7 million from the prior year.

Mega Millions (5.2 percent of total sales) experienced higher sales, up $26.0 million from last year's total. This product is a multi-state lotto style game with long odds of winning the top prize. Sales in this product are extremely dependent on the amount of the advertised jackpot, with sales increasing significantly as jackpots exceed $500 million. During fiscal year 2018, there were seven winning jackpot tickets sold, sharing in six jackpot prizes. Currently forty-four states, plus the District of Columbia and the U.S. Virgin Islands now sell Mega Millions.

Powerball (6.1 percent of total sales) experienced higher sales, up $18.1 million from last year. This product is similar to Mega Millions, a lotto type game with long odds of winning the jackpot. During fiscal year 2018, there were eight winning jackpot tickets sold, sharing in eight jackpot prizes. Currently forty-four states plus the District of Columbia, Puerto Rico and the U.S. Virgin Islands now sell Powerball.

Print 'n Play is an instant-win computer terminal product line that plays like a Scratch game. There were ten games in this category during fiscal year 2018. The Print and Play portfolio of games represents 2.1 percent of total sales, and sales increased $5.5 million from the prior year.

Raffle is a computer terminal game with a limited offering of tickets and prizes. The Lottery offered one Raffle during the year, the 12th annual New Year's Millionaire Raffle, with a drawing held on January 1, 2018. Raffle sales represent less than one percent of total product sales.

Cash4Life tickets are offered at a two dollar price point. Cash4Life has a top prize of $1,000 a day for life and a second prize of $1,000 a week for life. Cash4Life sales totaled $15.2 million in fiscal year 2018, representing less than one-percent of total product sales. During fiscal year 2018 New York, New Jersey, Pennsylvania, Maryland, Tennessee, Indiana, Florida, Georgia and Virginia sold Cash4Life.

Bank A Million tickets are offered at a two dollar price point. It is a game where players try to match six numbers from a field of forty, with a top prize of $1,000,000 and the Lottery pays the required tax withholdings. Bank A Million sales totaled $13.3 million in fiscal year 2018, representing less than one-percent of total product sales.

Expenses

Prizes are the largest expense for the Virginia Lottery and vary with sales fluctuations and player luck. The fiscal year 2018 prize payout rate (percent of sales paid out in prizes) was 61.1 percent, up from 61.0 percent in fiscal year 2017. The total prize dollars paid to winners increased $93.40 million, a record total won by Lottery players.

A summary of Virginia Lottery expenses for fiscal years ending June 30, 2018 and 2017 is shown in Table 4.

TABLE 4: EXPENSES

	2018		2017		Change	
Prize expense	*$1,307.70*	*85.2%*	*$1,214.30*	*84.8%*	*$93.40*	*7.7%*
Retailer compensation	*121.29*	*7.9%*	*111.96*	*7.8%*	*9.33*	*8.3%*
Operating expenses	*71.58*	*4.7%*	*75.03*	*5.2%*	*(3.45)*	*-4.6%*
Gaming Services	*33.97*	*2.2%*	*31.31*	*2.2%*	*2.66*	*8.5%*
Total	*$1,534.54*	*100%*	*$1,432.60*	*100%*	*$101.94*	*7.1%*

** $ in millions*

Retailer compensation increased as a result of higher sales. The overall retailer compensation rate was up slightly from the prior year (5.7 percent of total sales).

Operating expenses decreased in fiscal year 2018. In fiscal year 2017 the Lottery relocated its headquarters which significantly increased its operating expenses. The Lottery may spend up to ten percent of sales on operating costs; however, these costs represented only 4.9 percent of sales for the fiscal year.

Gaming services costs increased slightly in fiscal year 2018. These contract arrangements are constructed primarily as percentage of sales agreements, and mainly represent payments to the Lottery's one major contract partner, International Gaming Technologies (IGT). Effective starting in fiscal year 2015, the Lottery has product purchase contract arrangements with three vendors to produce scratch tickets, and owns the inventory of scratcher tickets until sold to retailers throughout Virginia. This arrangement continues to phase-in as existing ticket inventory (owned by a printing vendor) is sold through.

Other Income

Interest income is earned primarily on cash balances held and invested by the Virginia Department of Treasury on behalf of the Virginia Lottery. As Table 5 shows, interest income increased in 2018 due to higher earnings rates.

TABLE 5: OTHER INCOME

	2018	2017	Change
Interest income	*$1.26*	*$0.94*	*34%*
Net other income	*(0.31)*	*0.10*	*-410.0%*
Total	*$0.95*	*$1.04*	*-8.7%*

** $ in millions*

Net other income is derived from securities lending income, as well as various fees assessed to retailers for licensing and processing fees, penalties for failure to remit monies owed when due, fixed asset losses and other miscellaneous sources. Net other income decreased 410.0 percent in 2018.

Net Income, and Transfers to the Lottery Proceeds Fund

In fiscal year 2018, the Virginia Lottery generated $606.22 million in profits. As shown in Table 6, profits were higher than fiscal year 2017 by $47.9 million (8.6 percent). This was the highest net income in Virginia Lottery history. $596,659,304 of fiscal year 2018 net income was transferred to the Lottery Proceeds Fund during the year, as anticipated by the Appropriations Act. An amount of residual income totaling $9,563,190 is due to the Lottery Proceeds Fund, and will be transferred in fiscal year 2019.

TABLE 6: NET INCOME AND PERCENT OF SALES

	2018	2017	Change
Net Income	*$606.22 .... 28.3%*	*$558.31 .... 28.1%*	*$47.91...............8.6%*

** $ in millions*

Total Net Position

All Lottery profits are transferred to the Lottery Proceeds Fund. The negative Net Position of the Lottery at year end reflects Lottery's portion of net pension and other post-employment benefits liabilities for the Virginia Retirement System. The implementation of GASB Statement *68 Accounting and Financial Reporting for Pensions* for the year ending June 30, 2015 and GASB Statement *75 Accounting and Financial Reporting for Postemployment Other Than Pensions* for the year ending June 30, 2018, resulted in the Lottery's negative ending net position.

Statement of Cash Flows

The Statement of Cash Flows, summarized in Table 7, presents detailed information pertaining to the cash activity of the Virginia Lottery during the year. The first part of the statement reflects operating cash flows and shows the net cash provided by operating activities of the Virginia Lottery. Receipts from the sale of tickets and related services totaled $2,139.9 million. Uses of cash include payment of prizes to winners ($1,318.9 million) and payments to retailers, suppliers, and employees for goods and services ($220.1 million). The net cash provided by operating activities of $586.7 million represents a 7.7% increase.

The cash flows from the non-capital financing activities portion of the statement reflects the $608.8 million used for non-capital financing activities, the major portion being the $608.5 million in total transfers from the Virginia Lottery during the year. This amount represents the $596.7 million initial estimate of fiscal year 2018 Virginia Lottery profits for transfer to the Lottery Proceeds Fund prior to July 1, 2018, and the $11.8 million transfer of residual 2017 profits.

TABLE 7: STATEMENT OF CASH FLOWS

	2018	2017	Change
Cash flows from:			
Operating activities	*$586.72*	*$544.75*	*7.7 %*
Non-capital financing activities	*(608.79)*	*(599.88)*	*1.5 %*
Capital financing activities	*(3.12)*	*(8.82)*	*-64.6 %*
Investing activities	*12.11*	*14.41*	*-15.9 %*
Net change in cash	*(13.08)*	*(49.54)*	*-73.6%*
Ending cash and cash equivalents	*$ 13.20*	*$ 26.29*	*-49.8%*

** $ in millions*

Cash flows from capital financing activities reflect the purchase of capital assets acquired during the period ($3.1 million). The $12.1 million cash flows from investing activities reflect purchases of U.S. Treasuries to fund win for life prizes due to Virginia Lottery winners ($205,400) and payable over time, proceeds from maturing U.S. Treasuries previously purchased to fund Virginia Lottery U.S. Treasuries prizes payable ($11.1 million), and interest income on cash balances ($1.3 million). The net decrease in cash flows from activities totaled ($13.1 million).

Potentially Significant Factors Impacting Next Year

Virginia will continue to actively participate in multi-state gaming consortia on both the national and regional level, to ensure that product offerings sufficiently meet consumer demand for jackpot and appealing grand-prize games. In addition, Virginia continues to monitor competition from other gaming venues, both from neighboring states and from within Virginia after the 2018 legalization of historical horse race wagering in Virginia, a proposal for a tribal casino in central Virginia, and the U.S. Supreme Court's 2018 decision allowing states to provide legalized sports wagering.

The Virginia Lottery continues efforts to provide game and play offerings that appeal to a wide range of adult customers, and soon will introduce digital lottery games available to players while they are on the premises of licensed lottery retail establishments. Virginia law currently limits internet gaming to prepaid subscriptions for subsequent prize drawings even as several other state lotteries – including Georgia, Illinois, Kentucky, Michigan, New Hampshire, North Carolina and Pennsylvania – have implemented internet gaming. The Virginia Lottery's new MobilePlay platform allows players to register on their mobile devices and purchase both traditional draw-based games and mobile, digital-only games when they are actively connected by Bluetooth technology to a licensed retailer's lottery terminal. MobilePlay can provide products and services within existing statutory authority while meeting the expectations of today's consumer. These digital games will be available through existing retail locations as well as new, mobile-only licensed locations.

Contacting the Virginia Lottery

This financial report is designed to provide the legislative and executive branches of government, the public, and other interested parties with an overview of the financial results of the Virginia Lottery's activities and to demonstrate the Virginia Lottery's accountability for its revenues. If there are any questions about this report or any Virginia Lottery financial issue, please contact the Director of Finance at the Virginia Lottery, 600 East Main Street, Richmond, Virginia 23219.

Martha S. Mavredes, CPA
Auditor of Public Accounts

P.O. Box 1295
Richmond, Virginia 23218

October 15, 2018

The Honorable Ralph S. Northam
Governor of Virginia

The Honorable Thomas K. Norment, Jr.
Chairman, Joint Legislative Audit
And Review Commission

Virginia Lottery Board
Virginia Lottery

INDEPENDENT AUDITOR'S REPORT

Report on Financial Statements

We have audited the accompanying financial statements of the Virginia Lottery as of and for the year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise the Virginia Lottery's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Virginia Lottery as of June 30, 2018, and the changes in its financial position and its cash flows for the year ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

Relationship to the Commonwealth of Virginia

As discussed in Note 1A, the basic financial statements of the Virginia Lottery are intended to present the financial position, the changes in financial position and cash flows of only that portion of the business-type activities and the major enterprise fund of the Commonwealth of Virginia that is attributable to the transactions of the Virginia Lottery. They do not purport to, and do not, present fairly the Commonwealth of Virginia's overall financial position as of June 30, 2018, and the changes in its financial position and its cash flows, where applicable, for the year then ended in conformity with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

Change in Accounting Principle

As discussed in Note 1M of the accompanying financial statements, the Virginia Lottery implemented Governmental Accounting Standards Board (GASB) Statement No. 75, related to accounting and financial reporting for postemployment benefits other than pensions. Our opinion is not modified with respect to this matter.

Other Matters

Prior-Year Summarized Comparative Information

We have previously audited the Virginia Lottery's 2017 financial statements, and we expressed an unmodified audit opinion on the respective financial statements in our report dated

September 22, 2017. In our opinion, while the summarized comparative information presented herein as of and for the year ended June 30, 2017, is consistent, in all material respects, with the audited financial statements from which it has been derived, it does not include the necessary adjustments for the 2017 financial statements to be comparative with the 2018 financial statements as described in Note 1L.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages three through nine; the Schedule of Virginia Lottery's Share of Net Pension Liability, the Schedule of Virginia Lottery Contributions, and the Notes to Required Supplementary Information on pages 69 and 70; the Schedule of Virginia Lottery's Share of Net OPEB Liability, Schedule of Virginia Lottery Contributions, and Notes to the Required Supplementary Information for the Health Insurance Credit, Group Life Insurance, Disability Insurance, and Line of Duty programs on pages 71 through 80; and the Schedule of Virginia Lottery's Share of Total OPEB Liability and Notes to the Required Supplementary Information for the Pre-Medicare Retiree Healthcare program on page 81 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of the financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated October 15, 2018, on our consideration of the Virginia Lottery's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the Virginia Lottery's internal control over financial reporting and compliance.

Martha S. Mavredes

AUDITOR OF PUBLIC ACCOUNTS

AVC/clj

Virginia Lottery

2018 VIRGINIA LOTTERY // ANNUAL FINANCIAL STATEMENTS

for fiscal year ended June 30, 2018 with comparative information from 2017

VIRGINIA LOTTERY: STATEMENT OF NET POSITION (audited)

For fiscal year ended June 30, 2018 with comparative information for 2017

Assets & Deferred Outflows of Resources	2018	2017
Current Assets:		
Cash and Cash Equivalents (2)	$13,207,187	$26,290,192
Cash Held as Collateral: (2)		
Lottery Securities Lending	48,880,780	0
Treasury Securities Lending	699,459	0
Accounts Receivable	69,085,151	69,395,908
Instant Ticket Inventory (4)	10,146,195	6,664,322
Prepaid Expenses	1,231,042	678,025
Short-term U.S. Treasuries (2)	10,549,645	10,846,977
Total Current Assets	153,799,459	113,875,424
U.S. Treasuries (2)	105,934,824	111,162,242
Net OPEB Asset (15)	943,000	0
Capital Assets (3)		
Equipment and Intangible Assets	24,688,027	32,740,317
Less: Accumulated Depreciation/Amortization	(11,746,257)	(19,522,520)
Net Capital Assets	12,941,770	13,217,797
Total Assets	$273,619,053	$238,255,463
Deferred Outflows of Resources (12, 15)	3,851,536	5,785,045
Total Assets & Deferred Outflows of Resources	**$277,470,589**	**$244,040,508**

Liabilities & Deferred Inflows of Resources	2018	2017
Current Liabilities:		
Accounts Payable (11)	$19,476,631	$26,072,706
Treasury Loan (5)	0	0
Due to the Lottery Proceeds Fund (6)	9,563,190	11,819,169
Accrued Compensated Absences (7)	1,419,550	1,477,767
Obligations Under Securities Lending: (2)		
Lottery	48,880,780	0
Treasury	699,459	0
Prizes Payable: (8)		
U.S. Treasuries Prizes Payable - Current	10,549,645	10,846,977
Other Prizes Payable	74,067,265	74,482,342
Unearned Revenue	1,541,368	1,760,016
Total Current Liabilities	166,197,888	126,458,977
Noncurrent Liabilities:		
U.S. Treasuries Prizes Payable (8)	105,934,824	111,162,233
Net Pension Liability (12)	26,894,000	30,637,000
Net OPEB Liability (15)	8,343,329	0
Accrued Compensated Absences (7)	543,341	634,253
Total Liabilities	**307,913,382**	**268,892,463**
Deferred Inflows of Resources (12, 15)	3,604,782	834,000
Total Liabilities & Deferred Inflows of Resources	**$311,518,164**	**$269,726,463**
Net Position:		
Net Investment in Capital Assets	13,884,770	$13,217,797
Unrestricted	(47,932,345)	(38,903,752)
Total Net Position	**($34,047,575)**	**($25,685,955)**

VIRGINIA LOTTERY:
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION (audited)

For fiscal year ended June 30, 2018 with comparative information for 2017

	2018	2017
Operating Revenues:		
Ticket Sales	*$2,139,819,735*	*$1,989,872,193*
Less:		
Prize Expense	*1,307,698,463*	*1,214,303,447*
Retailer Compensation	*121,295,713*	*111,955,474*
Instant Ticket & Gaming Services	*33,967,932*	*31,311,036*
Gross Margin	*676,857,627*	*632,302,236*
Operating Expenses:		
Advertising and Promotion	*27,693,280*	*25,960,177*
General and Administrative	*40,494,914*	*46,461,419*
Depreciation	*3,396,754*	*2,609,639*
Total Operating Expenses	*71,584,948*	*75,031,235*
Income from Operations	*605,272,679*	*557,271,001*
Nonoperating Revenues (Expenses)		
Interest Income	*1,265,287*	*944,245*
Net Other Income	*(315,472)*	*99,712*
Total Nonoperating Revenues (Expenses)	*949,815*	*1,043,957*
Net Income	*606,222,494*	*558,314,958*
Transfer to the Lottery Proceeds Fund	*(596,659,304)*	*(546,495,789)*
Due from (to) the Lottery Proceeds Fund	*(9,563,190)*	*(11,819,169)*
Change in Pension due to GASB 68 (1J)	*(34,901)*	*49,011*
Change in OPEB due to GASB 75 (1K)	*(1,486,782)*	*0*
Total Net Position, July 1, 2017	*(25,685,955)*	*(25,734,966)*
Net effect of change in accounting principle (1M)	*(6,839,937)*	*0*
Net Position as restated, July 1, 2017	*(32,525,892)*	*(25,734,966)*
Net Position, June 30, 2018	*($34,047,575)*	*($25,685,955)*

VIRGINIA LOTTERY: STATEMENT OF CASH FLOWS (audited)

For fiscal year ended June 30, 2018 with comparative information for 2017

	2018	2017
Cash flows from operating activities:		
Cash received from ticket sales	$2,139,911,844	$1,982,594,358
Cash payments for prizes	(1,318,959,116)	(1,228,244,034)
Discounts for retailer compensation	(121,295,713)	(111,955,474)
Cash payments to supplier of instant and online services	(37,449,805)	(33,298,050)
Cash payments to suppliers of other goods and services	(30,675,397)	(21,876,140)
Cash payments to employees for services	(30,680,481)	(30,170,054)
Cash payments to the Literary Fund for unclaimed prizes (10)	(14,130,537)	(12,298,497)
Net cash provided by operating activities	586,720,795	544,752,109
Cash flows from noncapital financing activities:		
Proceeds from other income	(315,472)	99,712
Transfers to the Lottery Proceeds Fund	(608,478,473)	(599,982,144)
Net cash used by noncapital financing activities	(608,793,945)	(599,882,432)
Cash flows from capital financing and related activities:		
Acquisition of capital assets	(3,635,251)	(10,556,676)
Disposal of capital assets	514,523	1,736,419
Net cash used for capital financing activities	(3,120,728)	(8,820,257)
Cash flows from investing activities:		
Purchase of U.S. Treasuries	(205,414)	(182,718)
Proceeds from maturing U.S. Treasuries	11,051,000	13,651,000
Interest proceeds from cash balances	1,265,287	944,245
Net cash used for U.S. Treasuries and investing activities	12,110,873	14,412,527
Net increase in cash and cash equivalents	(13,083,005)	(49,538,053)
Cash and cash equivalents at July 1	26,290,192	75,828,245
Cash and cash equivalents at June 30	$13,207,187	$26,290,192
Reconciliation of operating income to net cash provided by operating activities:		
Income from operations	605,272,679	557,271,001
Adjustments to reconcile operating income to net cash:		
Depreciation	3,396,754	2,609,639
Accreted interest on U.S. Treasuries	(5,320,835)	(5,582,353)
Changes in assets, liabilities & deferred inflows/outflows:		
(Decrease)Increase in accounts receivable	310,757	(6,326,394)
(Increase) in instant ticket inventory	(3,481,873)	(1,987,014)
Increase in prepaid expenses	(553,017)	(2,475)
Decrease in deferred outflows	0	0
(Decrease)Increase in accounts payable	(6,596,075)	8,042,349
(Decrease)Increase in current prizes payable	(712,409)	(3,047,641)
(Decrease)Increase in unearned revenue	(218,648)	(951,441)
(Decrease)Increase in accrued compensated absences	(149,129)	37,031
(Decrease) in noncurrent prizes payable	(5,227,409)	(5,310,593)
Net cash provided by operating activities	$586,720,795	$544,752,109

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

Notes to Financial Statements

(as of June 30, 2018)

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Reporting Entity

The Virginia Lottery (formerly State Lottery Department) was established by Chapter 531 of the 1987 Acts of Assembly and operates as an independent agency in accordance with the provisions of Chapter 40 of Title 58.1 of the Code of Virginia.

The Virginia Lottery participates in three multi-state games, Mega Millions, Powerball and Cash4Life. Mega Millions and Powerball member lotteries include California, Georgia, Illinois, Maryland, Massachusetts, Michigan, New Jersey, New York, Ohio, Virginia, Washington and the Multi-State Lottery (MUSL) Group. Cash4Life member lotteries include Florida, Georgia, Indiana, Maryland, New Jersey, New York, Pennsylvania, Tennessee and Virginia. The financial activity included in the financial statements reflects only Virginia's portion of these multi-state games. Separate agreed-upon procedures reports are issued for Cash4Life, Mega Millions, and Powerball.

A separate report is prepared for the Commonwealth, which includes all agencies, boards, commissions, and authorities over which the Commonwealth exercises or has the ability to exercise oversight authority. The Virginia Lottery is an agency of the Commonwealth of Virginia and is included in the basic financial statements of the Commonwealth.

B. Basis of Accounting

The Virginia Lottery's financial statements have been prepared using the economic resources measurement focus and the accrual basis of accounting. Under the accrual basis revenues are recognized when earned and expenses when incurred. On-line ticket revenue, which includes sales of tickets generated through Lottery terminals and subscription purchases, is recognized as corresponding drawings are held. Instant ticket revenue, which includes sales of instant-win preprinted tickets, is recognized when tickets are activated for sale to the public by retailers.

C. Deferred Outflows of Resources

Deferred outflows of resources are defined as the consumption of net assets applicable to a future reporting period. The deferred outflows of resources have a positive effect on net position similar to assets.

D. Deferred Inflows of Resources

Deferred inflows of resources are defined as the acquisition of net assets applicable to a future reporting period. The deferred inflows of resources have a negative effect on net position similar to liabilities.

E. Revenue and Expense Classifications

Operating revenues and expenses include activities related to the sale of lottery tickets. Operating expenses include prizes to winners, compensation to retailers, and instant ticket printing costs. Non-operating revenues and expenses include activities that have the characteristics of investing transactions and capital and non-capital financing activities as defined by Governmental Accounting Standards Board (GASB) Statement 9, *Reporting Cash Flows of Proprietary and Nonexpendable Trust Funds and Governmental Entities That Use Proprietary Fund Accounting*, and GASB Statement 34.

Non-operating revenues include interest income from its cash balances held with the Treasurer of Virginia.

F. Fund Accounting

The activities of the Virginia Lottery are accounted for in an enterprise fund, used to account for governmental operations that are financed and operated in a manner similar to private business enterprises. Enterprise fund accounting is used where the governing body has decided that periodic determination of revenues earned, expenses incurred, and net income is appropriate.

G. Cash, Cash Equivalents, and U.S. Treasuries

The Virginia Lottery's cash and cash equivalents are considered to be cash on hand, cash with the Treasurer of Virginia and deposits.

Statutes authorize the Virginia Lottery to invest in obligations of the Commonwealth, federal government, other states or political subdivisions thereof, the International Bank for Reconstruction and Development, the Asian Development Bank, and the African Development Bank. In addition, the Virginia Lottery may invest in prime quality commercial paper rated prime 1 by Moody's Investment Service or A-1 by Standard and Poor's, Incorporated; overnight term or open repurchase agreements; and money market funds comprised of U.S. Treasuries, which are otherwise legal U.S. Treasuries of the Virginia Lottery.

U.S. Treasuries, both current and long-term, consist of U.S. Treasury STRIPS purchased to fund individual jackpot and "For Life" prizes. U.S. Treasuries are valued at cost plus accrued interest, not at fair market value, as it is management's intention to hold these U.S. Treasuries to maturity to match the future payment obligations to winners.

H. Capital Assets

Equipment, property and intangible assets are capitalized and depreciated/amortized on a straight-line basis over their estimated useful lives and are valued at historical or amortized cost. The Virginia Lottery capitalizes all equipment and property assets that have a cost or value equal to or greater than $5,000 and an expected useful life of more than one year. During fiscal year 2018 the Virginia Lottery adjusted its capitalization threshold for intangible assets from $5,000 to $100,000.

I. Significant Contracts

The Virginia Lottery competitively executed a new contract to provide and operate the gaming system and network effective beginning October 28, 2017. The contract provides new sales and peripheral equipment at all retailer locations throughout the Commonwealth, as well as the central gaming system and related applications. Primarily a percentage of sales agreement, IGT will receive 0.7840% of total net sales that are processed through the IGT system, 0.4375% of net instant game ticket sales for the warehousing and distribution of scratch tickets, and has a total estimated contract value of $185,000,000 for the 7-year contract period.

IGT has established a facilities management agreement with the Lottery, through which IGT installs and manages retailer equipment, and manages transaction processing systems to record transactions originating throughout the Commonwealth. IGT also provides various professional services, software development and testing support, backup data processing, and a comprehensive satellite communications network to support gaming systems operations.

J. Pensions

In June 2012, the Governmental Accounting Standards Board (GASB) issued Statement 68, *Accounting and Financial Reporting for Pensions*, which requires governments that participate in defined benefit pension plans to report in their statement of net position a net pension liability, which is the difference between the total pension liability and the assets set aside to pay pension benefits. The Virginia Lottery at June 30, 2015 implemented the new requirement which resulted in negative net position.

The Virginia Lottery made an adjustment of $34,901 to pension expense. The Change in Pension was due to GASB 68 line represents the net effect of the adjustments necessary to record pension related activity under GASB 68, which has been reported outside of operating expenses as it is not considered in the determination of the amount required to be transferred to the Lottery Proceeds Fund.

The Virginia Retirement System (VRS) State Employee 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 additions to/deductions from the VRS State Employee 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.

K. Other Post-Employment Benefits

In June 2015, the Governmental Accounting Standards Board (GASB) issued Statement 75 *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, which requires governments that participate in other postemployment benefit plans to report in their statement of net position an OPEB liability and an OPEB assets to pay OPEB benefits. The Virginia Lottery at June 30, 2018 implemented the new requirement which resulted in negative net position.

The Virginia Lottery made an adjustment of $1,486,782 to other postemployment benefit expense. The change in OPEB was due to GASB 75, it represents the net effect of the adjustments necessary to record OPEB related activity under GASB 75, which has been reported outside of operating expenses as it is not considered in the determination of the amount required to be transferred to the Lottery Proceeds Fund.

State Employee Health Insurance Credit Program

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

VRS Disability Insurance Program

The Virginia Retirement System (VRS) Disability Insurance Program (Virginia Sickness and Disability Program) is a single employer plan that is presented as a multiple-employer, cost-sharing plan. The Disability Insurance Program was established pursuant to §51.1-1100 et seq. of the Code of Virginia, as amended, and which provides the authority under which benefit terms are established or may be amended. The Disability Insurance Program is a managed care program that provides sick, family and personal leave and short-term and long-term disability benefits for State Police Officers, state employees, and VaLORS employees. For purposes of measuring the net Disability Insurance Program OPEB liability (asset), deferred outflows of resources and deferred inflows of resources related to the Disability Insurance Program OPEB, and Disability Insurance Program OPEB expense, information about the fiduciary net position of the Virginia Retirement System (VRS) Disability Insurance Program OPEB Plan and the additions to/deductions from the VRS Disability Insurance Program OPEB Plan's net fiduciary position have been determined on the same basis as they were reported by VRS. In addition, benefit payments are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Group Life Insurance

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

Line of Duty Act Program

The Virginia Retirement System (VRS) Line of Duty Act Program (LODA) is a multiple-employer, cost-sharing plan. The Line of Duty Act Program was established pursuant to §9.1-400 et seq. of the Code of Virginia, as amended, and which provides the authority under which benefit terms are established or may be amended. The Line of Duty Act Program provides death and health insurance benefits to eligible state employees and local government employees, including volunteers, who die or become disabled as a result of the performance of their duties as a public safety officer. In addition, health insurance benefits are provided to eligible survivors and family members. For purposes of measuring the net Line of Duty Act Program OPEB liability, deferred outflows of resources and deferred inflows of resources related to the Line of Duty Act Program OPEB, and Line of Duty Act Program OPEB expense, information about the fiduciary net position of the Virginia Retirement System (VRS) Line of Duty Act Program OPEB Plan and the additions to/deductions from the VRS Line of Duty Act Program OPEB Plan's net fiduciary position have been determined on the same basis as they were reported by VRS. In addition, benefit payments are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Pre-Medicare Retiree Healthcare Plan

The Department of Human Resource Management (DHRM) is an agency of the Commonwealth of Virginia. DHRM is the administrator of the Commonwealth's employee health insurance program. The Commonwealth provides a healthcare plan established by Title 2.2, Chapter 28 of the Code of Virginia for retirees who are not eligible to participate in Medicare. The Lottery does not pay a portion of the retirees' healthcare premium; however, since both active employees and retirees are included in the same pool for purposes of determining health insurance rates, this generally results in a higher rate for active employees. Therefore, the Lottery effectively subsidizes the costs of the participating retirees' healthcare through payment of the employer's portion of premiums for active employees.

L. Summarized Comparative Data

The basic financial statements include certain prior-year partial comparative information in total but not at the level of detail required for a presentation in conformity with generally accepted accounting principles. Accordingly, such information should be read in conjunction with the Virginia Lottery's financial statements for the year ended June 30, 2017, from which the summarized information was derived.

As a result of the implementation of GASB 75, the Lottery's financial statements for the year ended June 30, 2018 are not comparative, due to unavailable other post-employment benefits adjustments for the June 30, 2017 financial statements.

M. Change in Accounting Principle

Net position as of July 1, 2017 has been restated as follows for the implementation of the Governmental Accounting Standards Board (GASB) issued Statement *75 Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*:

Net Position as previously reported at June 30, 2017	*$(25,685,955)*
Net Position Restatement:	
Net OPEB Liability - June 30, 2016 measurement date	*(8,343,329)*
Less: Net OPEB Asset - June 30, 2016 measurement date	*943,000*
Less: Deferred outflows - Fiscal Year 2017 Contributions	*560,392*
Total Net Position restatement	*(6,839,937)*
Net Position as restated, July 1, 2017	*$(32,525,892)*

N. Accounts Receivable

The Lottery has an account receivable account which consists of proceeds from ticket sales by its retailers. Retailers have from one to three weeks from the activation of those tickets for sale to transfer funds to the Lottery for the sale of those tickets. All Lottery retailers have a surety bond to protect Lottery assets, and funds collected by retailers on behalf of the Lottery are legal trust funds. Uncollected receivables are virtually non-existent.

2. CASH AND CASH EQUIVALENTS AND U.S. TREASURIES

Cash and cash equivalents represent cash with the Treasurer of Virginia and deposits. Cash with the Treasurer of Virginia is held pursuant to Section 2.2-1800, et seq., Code of Virginia. These funds are held in pooled accounts and, accord¬ingly, are not categorized as to credit risk as defined by GASB Statement 40. Cash on deposit is held in demand deposit accounts maintained for prize payments and is covered by federal depository insurance with the balance in excess of this insurance collateralized in accordance with the Virginia Security for Public Deposits Act. Under this Act, banks holding public deposits in excess of the amounts insured by FDIC pledge collateral in the amount of 50 percent of deposits in excess of FDIC insurance coverage to a collateral pool held in the name of the State Treasury Board. For June 30, 2018, the total cash and cash equivalents equaled $13,207,187. This included petty cash on hand of $1,069.

In accordance with the State Treasurer and the Virginia Lottery's investment policy, funds are invested in U.S Treasury obligations for the purpose of payment of deferred prizes to winners. The U.S. Treasuries held for future prize payments are available for lending to broker-dealers and other entities (borrowers) for cash collateral that will be returned for the same securities in the future.

Custodial Credit Risk - Custodial credit risk is the risk that, in the event of the failure of the counterparty, the state and Virginia Lottery will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. All security loan agreements are collateralized at loan inception at no less than 100 percent of market value by cash or U.S. government obligations and adjusted to market daily, at a minimum, to cover market value fluctuations. Collateral cash is invested in accordance with the investment policies of the State Treasury Board of the Commonwealth of Virginia, and credit rating categories are detailed as part of this footnote. Management assumes reasonable credit risk in the U.S. Treasuries, and fluctuations in market conditions may value the invested cash Collateral less than the original investment.

Interest Rate Risk - Interest rate risk is the risk that investment's fair value decreases as market interest rates increase. The U.S. Treasuries in prize annuities are subject to fluctuations in fair value due to interest rate risk, but these bonds are held to maturity to satisfy annual installment obligations to the prize winners. The fair value at maturity is the face value of the bonds, regardless of the fluctuations in the value during the time period that the U.S. Treasuries are outstanding.

U.S. Treasuries consist of the following:

CREDIT RATING

	(unrated)
Prize annuities:	
Treasury bonds	*116,848,469*
Total	*$116,484,469*

U.S. TREASURIES

	Less than 1 year	*1-5 years*	*6-10 years*	*11-20 years*	*Over 20 years*
Prize annuities:					
Treasury bonds(1)	*10,549,645*	*44,469,322*	*33,897,596*	*25,351,291*	*2,216,615*
	$10,549,645	*$44,469,322*	*$33,897,596*	*$25,351,291*	*$2,216,615*

(1) Virginia Lottery prize annuities of U.S. Treasuries are insured or registered, or for which the securities are held by the Virginia Lottery or its safekeeping agent in the Virginia Lottery's name. All annuities of U.S. Treasuries are made through the U.S. government and agency securities that are explicitly guaranteed by the U.S. government.

Securities Lending

Securities Lending – Collateral for securities lending reported on the statement of net position represents cash collateral received by the Lottery that is subsequently reinvested through the State Treasury's securities lending program. The Commonwealth's policy is to record unrealized gains and losses for the State Treasury's securities lending program in the General Fund in the Commonwealth's basic financial statements.

When the Commonwealth realizes gains or losses, or determines that a security is other than temporarily impaired, the State Treasury allocates the actual gains and losses to the affected agencies for recording. Detailed information related to the credit risk of these investments and the State Treasury's securities lending program is available on a statewide level in the Commonwealth of Virginia's Comprehensive Annual Financial Report.

In conjunction with the State Treasury, the Lottery resumed participation in the Securities Lending program during the 2018 fiscal year.

3. CAPITAL ASSETS

The following schedule presents the changes in capital assets.

	Balance as of July 1, 2017	Additions	Reductions	Balance as of June 30, 2018
Equipment Assets	*$28,872,813*	*$3,627,508*	*($10,971,491)*	*$21,528,830*
Intangible Assets:	*3,867,504*	*7,742*	*(716,049)*	*3,159,197*
Less: Accumulated Depreciation/Amortization	*19,522,520*	*3,396,754*	*(11,173,017)*	*11,746,257*
Net Capital Assets	*$13,217,797*	*$238,496*	*($514,523)*	*$12,941,770*

4. INSTANT TICKET INVENTORY

Inventories are valued at cost, using a weighted average basis, and are expensed over the life of each game as instant-win scratch tickets are activated for sale by retailers.

5. LINE OF CREDIT

The State Comptroller has provided the Virginia Lottery with a line of credit not to exceed $40 million in accordance with Section 3-2.03 of the 2018 Amendments to the 2017 Appropriation Act, 2018 Virginia Acts of Assembly – Chapter 1, to fund administrative and operating expenses in the event unreserved cash is insufficient to cover these short-term costs. There were no outstanding borrowings during the year ended June 30, 2018.

6. DUE FROM/ (TO) THE LOTTERY PROCEEDS FUND

The amount due from/(to) the Lottery Proceeds Fund represents Virginia Lottery net income payable to the Commonwealth of Virginia's Lottery Proceeds Fund in accordance with 2018 Amendments to the 2017 Appropriation Act, 2018 Virginia Acts of Assembly – Chapter 1, and Section 58.1-4022.1, Code of Virginia. The Lottery Proceeds Fund is a special non-reverting fund established solely for the purpose of public education in the Commonwealth. For the year ended June 30, 2018 the net income was $606,222,494, with a net income transfer through June 30 of $596,659,304 and a balance due to the Lottery Proceeds Fund of $9,563,190.

7. COMPENSATED ABSENCES

CCompensated absences represent the amounts of vacation, sick, and compensatory leave earned by employees of the Virginia Lottery, but not taken at June 30, 2018 and 2017. Compensated absences were calculated in accordance with GASB Statement 16, *Accounting for Compensated Absences*. The amount reflects all earned leave payable under the Virginia Lottery's leave payout policies. Information on the Commonwealth's leave policy is available at the statewide level in the Commonwealth of Virginia's Comprehensive Annual Financial Report.

Balance As Of July 1, 2017	Increases	Decreases	Balance As Of June 30, 2018	Due Within One Year
$2,112,020	*$1,474,046*	*$1,623,175*	*$1,962,891*	*$1,419,550*

8. PRIZES PAYABLE

Jackpot prize annuities are paid in 20, 25, 26, or 30 installments. The first installment is paid on or about the day the prize is claimed. The subsequent annual payments are funded with U.S. Treasury STRIPS purchased by the Virginia Lottery following a winner's irrevocable election of an annuity option. Jackpot winners also have the option of accepting their winnings in a lump sum cash payout. "For Life" prizes payable represents estimated prizes payable monthly, quarterly, or annually for the life of the winner based on life expectancy tables from the Virginia Bureau of Insurance and funded with a pool of U.S. Treasury STRIPS.

U.S. Treasuries prizes payable represents the future annual prize payments valued at cost plus accrued interest (current value of securities held to maturity) of the investment securities funding the payments.

U.S. TREASURIES PRIZES PAYABLE
Balance as of June 30, 2018

	Jackpot	Instant For Life	Online For Life	Total
Due within one year	5,651,509	3,568,304	1,329,832	10,549,645
Due in subsequent years	45,333,154	45,052,996	15,548,674	105,934,824
Total (current value)	50,984,663	48,621,300	16,878,506	116,484,469
Add: Interest to maturity	17,752,337	23,523,700	6,357,494	47,633,531
Total at Maturity	$68,737,000	$72,145,000	$23,236,000	$164,118,000

Other prizes payable represents prizes won but not yet claimed, from drawings or other games which may or may not have ended, and where these prizes are redeemable for up to 180 days after the drawing or game end. "For Life" prizes, for which bonds have not yet been purchased, are also reported as other prizes payable.

Prizes payable increases when jackpot winners select annuities and securities are purchased. Prizes payable decreases when securities mature to pay prior jackpot winners.

The following schedule presents the changes in U.S. Treasuries prizes payable.

Balance As Of July 1, 2017	Increases	Decreases	Balance As Of June 30, 2018
$122,009,210	$205,414	$5,730,155	$116,484,469

9. OPERATING LEASE COMMITMENTS

The Virginia Lottery is committed under various operating lease agreements. The operating leases are for customer service centers. Expenses under operating lease agreements were $577,516 for the year ended June 30, 2018. A summary of future obligations under these agreements as of June 30, 2018, follows:

Year Ended June 30, 2017 Obligation	Operating Lease Principal
2019	$607,076
2020	614,824
2021	622,780
2022	571,736
2023	548,891
2024	265,796
2025	72,801
Total	$3,303,904

10. LITERARY FUND AND SETOFF DEBT COLLECTION PAYMENTS

Prizes unclaimed after 180 days are paid to the Literary Fund of the Commonwealth. Payments totaled $14,130,537 for the year ended June 30, 2018.

The Virginia Lottery participates in the Setoff Debt Collection Act whereby certain prize payments are withheld to set-off state obligations the prizewinner owes. Payments totaled $1,970,578 for the year ended June 30, 2018. The Literary Fund and state debt setoff payments are reported as prize expense on the financial statements.

11. ACCOUNTS PAYABLE

Accounts payable consisted of the following as of June 30, 2018:

Voucher Payable	*$9,604,347*
Expired Prizes Payable	*7,010,143*
Player Wallet Payable	*625,322*
Payroll Payable	*2,192,001*
Player Tax Withholdings	*44,818*
Total	*$19,476,631*

12. PENSION PLAN AND OTHER POST RETIREMENT BENEFITS

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 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. 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. 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.*

(Chart continued on next page)

RETIREMENT PLAN PROVISIONS BY PLAN STRUCTURE

Plan 1	Plan 2	Hybrid Retirement Plan
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.*	• *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.*
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.*	***Eligible Members*** *Employees are in the Hybrid Retirement Plan if their membership date is on or after January 1, 2014. This includes:* • *State employees* Members in Plan 1 or Plan 2 who elected to opt into the plan during the election window held January 1-April 30, 2014; the plan's effective date for opt-in members was July 1, 2014.* ****Non-Eligible Members*** *Some employees are not eligible to participate in the Hybrid Retirement Plan.* *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.*

(Chart continued on next page)

RETIREMENT PLAN PROVISIONS BY PLAN STRUCTURE		
Plan 1	**Plan 2**	**Hybrid Retirement Plan**
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 contributions to provide funding for the future benefit payment.*	***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 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.*

(Chart continued on next page)

RETIREMENT PLAN PROVISIONS BY PLAN STRUCTURE		
Plan 1	**Plan 2**	**Hybrid Retirement Plan**
Vesting *Vesting is the minimum length of service a member needs to qualify for a future retirement benefit. Members become vested when they have at least five years (60 months) of creditable service. Vesting means members are eligible to qualify for retirement if they meet the age and service requirements for their plan. Members also must be vested to receive a full refund of their member contribution account balance if they leave employment and request a refund.* *Members are always 100% vested in the contributions that they make.*	***Vesting*** *(Same as Plan 1)*	***Vesting*** ***<u>Defined Benefit Component:</u>*** *Defined benefit vesting is the minimum length of service a member needs to qualify for a future retirement benefit.* *Members are vested under the defined benefit component of the Hybrid Retirement Plan when they reach five years (60 months) of creditable service. Plan 1 or Plan 2 members with at least five years (60 months) of creditable service who opted into the Hybrid Retirement Plan remain vested in the defined benefit component.* ***<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.*

(Chart continued on next page)

RETIREMENT PLAN PROVISIONS BY PLAN STRUCTURE		
Plan 1	**Plan 2**	**Hybrid Retirement Plan**
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 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 Contributions 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 the 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%.*	***Service Retirement Multiplier / VRS:*** *Same as Plan 1 for service earned, purchased or granted prior to January 1, 2013. For nonhazardous duty members the retirement multiplier is 1.65% for creditable service earned, purchased or granted on or after January 1, 2013.*	***Service Retirement Multiplier / VRS:*** ***Defined Benefit Component:*** *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.* ***Defined Contribution Component:*** *Not applicable.*
Normal Retirement Age / VRS: *Age 65*	***Normal Retirement Age / VRS:*** *Age 65*	***Normal Retirement Age / VRS:*** *(Same as Plan 2)* ***Defined Contribution Component:*** *Members are eligible to receive distributions upon leaving employment, subject to restrictions.*

(Chart continued on next page)

<table>
<tr><th colspan="3">RETIREMENT PLAN PROVISIONS BY PLAN STRUCTURE</th></tr>
<tr><th>Plan 1</th><th>Plan 2</th><th>Hybrid Retirement Plan</th></tr>
<tr>
<td>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.</td>
<td>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.</td>
<td>Earliest Unreduced Retirement Eligibility / VRS:
<u>Defined Benefit Component:</u>
Normal Social Security retirement age and have at least five years (60 months) of creditable service or when their age and service equal 90.
<u>Defined Contribution Component:</u>
Members are eligible to receive distributions upon leaving employment, subject to restrictions.</td>
</tr>
<tr>
<td>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.</td>
<td>Earliest Reduced Retirement Eligibility / VRS:
Age 60 with at least five years (60 months) of creditable service.</td>
<td>Earliest Unreduced Retirement Eligibility / VRS:
<u>Defined Benefit Component:</u>
Age Members may retire with a reduced benefit as early as age 60 with at least five years (60 months) of creditable service.

<u>Defined Contribution Component:</u>
Members are eligible to receive distributions upon leaving employment, subject to restrictions.</td>
</tr>
<tr>
<td>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%.

<u>COLA Eligibility:</u>
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.</td>
<td>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%.

<u>COLA Eligibility:</u>
(Same as Plan 1)</td>
<td>Cost-of-Living Adjustment (COLA) in Retirement

<u>Defined Benefit Component:</u>
(Same as Plan 2)

<u>Defined Contribution Component:</u>
Not applicable

<u>COLA Eligibility:</u>
(Same as Plan 1 and Plan 2)</td>
</tr>
</table>

(Chart continued on next page)

RETIREMENT PLAN PROVISIONS BY PLAN STRUCTURE		
Plan 1	**Plan 2**	**Hybrid Retirement Plan**
Exceptions to COLA Effective Dates: *The COLA is effective July 1 following one full calendar year (January 1 to December 31) under any of the following circumstances:* • *The member is within five years of qualifying for an unreduced retirement benefit as of January 1, 2013.* • *The member retires on disability.* • *The member retires directly from short-term or long term disability under the Virginia Sickness and Disability Program (VSDP).* • *The member 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*	***Exceptions to COLA Effective Dates:*** *(Same as Plan 1)*	***Exceptions to COLA Effective Dates:*** *(Same as Plan 1 and Plan 2)*

(Chart continued on next page)

RETIREMENT PLAN PROVISIONS BY PLAN STRUCTURE		
Plan 1	**Plan 2**	**Hybrid Retirement Plan**
Disability Coverage *Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.7% on all service, regardless of when it was earned, purchased or granted.* *Most state employees are covered under the Virginia Sickness and Disability Program (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.*	***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 (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.*	***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 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, 2018 was 13.49% of covered employee compensation for employees in the VRS State Employee Retirement Plan. This rate was based on an actuarially determined rate 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 2010-2012 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 Virginia Lottery to the VRS State Employee Retirement Plan were $2,453,144 and $2,431,045 for the years ended June 30, 2018 and June 30, 2017, respectively.

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

At June 30, 2018, the Virginia Lottery reported a liability of $26,894,000 for its proportionate share of the VRS State Employee Retirement Plan Net Pension Liability. The Net Pension Liability was measured as of June 30, 2017 and the total pension liability used to calculate the Net Pension Liability was determined by an actuarial valuation as of that date. The Virginia Lottery's proportion of the Net Pension Liability was based on the Virginia Lottery's actuarially determined employer contributions to the pension plan for the year ended June 30, 2017 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2017, the Virginia Lottery's proportion of the VRS State Employee Retirement Plan was 0.46150% as compared to 0.46485% at June 30, 2016.

For the year ended June 30, 2018, the Virginia Lottery recognized pension expense of $2,472,000 for the VRS State Employee Retirement Plan. Since there was a change in proportionate share between June 30, 2016 and June 30, 2017, 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, 2018, the Virginia Lottery 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	*$57,000*	*$813,000*
Change in assumptions	*261,000*	*-*
Net difference between projected and actual earnings plan investments	*-*	*1,149,000*
Changes in proportion and differences between Employer contributions and proportionate share of contributions	*520,000*	*156,000*
Employer contributions subsequent to the measurement date	*2,453,144*	*-*
Total	*$3,291,144*	*$2,118,000*

$2,453,144 reported as deferred outflows of resources related to pensions resulting from the Virginia Lottery'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	Total
2019	*($633,000)*
2020	*$156,000*
2021	*($31,000)*
2022	*($772,000)*
2023	*-*

Actuarial Assumptions

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

Inflation	Salary Increases, Including Inflation	Investment Rate Of Return Expense, Including Inflation*
2.5%	*3.5% – 5.35%*	*7.0%, net of pension plan investment*

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

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

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

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

Mortality rates (Pre-retirement, post- 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*
Line of Duty Disability	*Increase rate from 14% to 25%*

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, 2017, NPL amounts for the VRS State Employee Retirement Plan are as follows (amounts expressed in thousands):

State Employee Retirement Plan	
Total Pension Liability	*$23,617,412*
Plan Fiduciary Net Position	*17,789,888*
Employers' Net Pension Liability (Asset)	*$5,827,524*
Plan Fiduciary Net Position as a Percentage of the Total Pension Liablity	*75.33%*

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*
Public Equity	*40.00%*	*4.54%*	*1.82%*
Fixed Income	*15.00%*	*0.69%*	*0.10%*
Credit Strategies	*15.00%*	*3.96%*	*0.59%*
Real Assets	*15.00%*	*5.76%*	*0.86%*
Private Equity	*15.00%*	*9.53%*	*1.43%*
Total	*100.00%*		*48%*
		Inflation	*2.50%*
		*Expected Arithmetic Nominal Return**	*7.30%*

** The above allocation provides a one-year return of 7.30%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 6.83%, including expected inflation of 2.50%.*

Discount Rate

The discount rate used to measure the total pension liability was 7.00%. The projection of cash flows used to determine the discount rate assumed that System member contributions will be made per the VRS Statutes and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Through the fiscal year ending June 30, 2019, the rate contributed by the Virginia Lottery for the

VRS State Employee Retirement Plan will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly. From July 1, 2019 on, 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 Virginia Lottery's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate

The following presents the Virginia Lottery's proportionate share of the VRS 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:

VIRGINIA LOTTERY'S PROPORTIONATE SHARE OF THE VRS STATE EMPLOYEE RETIREMENT PLAN NET PENSION LIABILITY

1% Decrease (6.00%)	*Current Discount Rate (7.00%)*	*1% Increase (8.00%)*
$39,726,000	*$26,894,000*	*$16,118,000*

Pension Plan Fiduciary Net Position

Detailed information about the VRS State Employee Retirement Plan's Fiduciary Net Position is available in the separately issued VRS 2017 Comprehensive Annual Financial Report (CAFR). A copy of the 2017 VRS CAFR may be downloaded from the VRS website at **http://www.varetire.org/Pdf/Publications/2017-annual-report.pdf**, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

13. RISK MANAGEMENT

The Virginia Lottery is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; non-performance of duty; injuries to employees; and natural disasters. The Virginia Lottery participates in insurance plans maintained by the Commonwealth of Virginia. The state employee health care and worker's compensation plans are administered by the Department of Human Resource Management and the risk management insurance plans are administered by the Department of Treasury, Division of Risk Management. Risk management insurance includes property, general liability, medical malpractice, faithful performance of duty bond, automobile, and air and watercraft plans. The Virginia Lottery pays premiums to each of these departments for its insurance coverage. Information relating to the Commonwealth's insurance plans is available at the statewide level in the Commonwealth of Virginia's Comprehensive Annual Financial Report.

14. CONTINGENCIES

The Virginia Lottery is currently not named as a party in any legal proceedings.

15. OTHER POSTEMPLOYMENT BENEFITS

The Virginia Lottery participates in postemployment benefit programs that are sponsored by the Commonwealth and administered by the Virginia Retirement System. These programs include the Group Life Insurance Program, Virginia Sickness and Disability Program, Retiree Health Insurance Credit Program, and Line of Duty Act Program.

General Information about the State Employee Health Insurance Credit Program

Plan Description

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

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

STATE EMPLOYEE HEALTH INSURANCE CREDIT PROGRAM (HIC) PLAN PROVISIONS
Eligible Employees The State Employee Retiree Health Insurance Credit Program was established January 1, 1990 for retired state employees covered under VRS, SPORS, VaLORS and JRS who retire with at least 15 years of service credit. Eligible employees are enrolled automatically upon employment. They include: ● Full-time and part-time permanent salaried state employees covered under VRS, SPORS, VaLORS and JRS.
Benefit Amounts The State Employee Retiree Health Insurance Credit Program provides the following benefits for eligible employees: ● **At Retirement** – For State employees who retire, the monthly benefit is $4.00 per year of service per month with no cap on the benefit amount. ● **Disability Retirement** – For State employees, other than state police officers, who retire on disability or go on long-term disability under the Virginia Sickness and Disability Program (VSDP), the monthly benefit is $120.00 or $4.00 per year of service, whichever is higher. For State police officers employees with a non-work-related disability who retire on disability or go on long-term disability under the Virginia Sickness and Disability Program (VSDP) the monthly benefit is $120.00 or $4.00 per year of service, whichever is higher. For State police officers employees with a work-related disability, there is no benefit provided under the State Employee Retiree Health Insurance Credit Program if the premiums are being paid under the Virginia Line of Duty Act. However, they may receive the credit for premiums paid for other qualified health plans.
Health Insurance Credit Program Notes: ● The monthly Health Insurance Credit benefit cannot exceed the individual premium amount. ● Employees who retire after being on long-term disability under VSDP must have at least 15 years of service credit to qualify for the health insurance credit as a retiree.

Contributions

The contribution requirement for active employees is governed by §51.1-1400(D) of the *Code of Virginia*, as amended, but may be impacted as a result of funding provided to state agencies by the Virginia General Assembly. Each state agency's contractually required employer contribution rate for the year ended June 30, 2018 was 1.18% of covered employee compensation for employees in the VRS State Employee Health Insurance Credit Program. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2015. The actuarially determined rate was expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Contributions from the Virginia Lottery to the VRS State Employee Health Insurance Credit Program were $221,644 and $ 217,864 for the years ended June 30, 2018 and June 30, 2017, respectively.

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

At June 30, 2018, the Virginia Lottery reported a liability of $2,602,000 for its proportionate share of the VRS State Employee Health Insurance Credit Program Net OPEB Liability. The Net VRS State Employee Health Insurance Credit Program OPEB Liability was measured as of June 30, 2017 and the total VRS State Employee Health Insurance Credit Program OPEB liability used to calculate the Net VRS State Employee Health Insurance Credit Program OPEB Liability was determined by an actuarial valuation as of that date. The Virginia Lottery's proportion of the Net VRS State Employee Health Insurance Credit Program OPEB Liability was based on the state agency's actuarially determined employer contributions to the VRS State Employee Health Insurance Credit Program OPEB plan for the year ended June 30, 2017 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2017, the Virginia Lottery's proportion of the VRS State Employee Health Insurance Credit Program was 0.28574% as compared to 0.29212% at June 30, 2016.

For the year ended June 30, 2018, the Virginia Lottery recognized VRS State Employee Health Insurance Credit Program OPEB expense of $221,644. Since there was a change in proportionate share between June 30, 2016 and June 30, 2017 a portion of the VRS State Employee Health Insurance Credit Program Net OPEB expense was related to deferred amounts from changes in proportion.

At June 30, 2018, the Virginia Lottery reported deferred outflows of resources and deferred inflows of resources related to the VRS State Employee Health Insurance Credit Program OPEB from the following sources:

	Deferred Outflows Of Resources	***Deferred Inflows Of Resources***
Differences between expected and actual experience	-	-
Net difference between projected and actual earnings on State HIC OPEB plan investments	-	*$6,000*
Change in assumptions	-	*30,000*
Changes in proportionate share	-	*49,000*
Employer contributions subsequent to the measurement date	*$221,644*	
Total	*$221,644*	*$85,000*

$221,644 reported as deferred outflows of resources related to the State Employee HIC OPEB resulting from the state agency's contributions subsequent to the measurement date will be recognized as a reduction of the Net State Employee HIC OPEB Liability in the Fiscal Year ending June 30, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the State Employee HIC OPEB will be recognized in the State Employee HIC OPEB expense in future reporting periods as follows:

Year Ended June 30	*Total*
2019	*($17,000)*
2020	*($17,000)*
2021	*($17,000)*
2022	*($17,000)*
2023	*($15,000)*
Thereafter	*($2,000)*

Actuarial Assumptions

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

Inflation	*Salary Increases, Including Inflation*		*Investment Rate Of Return Expense, Including Inflation**
2.5%	*General state employees*	*3.50% – 5.35%*	*7.0%, net of pension plan investment*
	SPORS employees	*3.50% – 4.75%*	
	VaLORS employees	*3.50% – 4.75%*	
	JRS employees	*4.75%*	

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

Mortality Rates-General State Employees

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

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

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

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

Mortality rates (Pre-retirement, post- retirement healthy, and disabled	*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*
Line of Duty Disability	*Increase rate from 14% to 25%*

Mortality rates – SPORS Employees

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

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

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

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

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

Mortality rates – VaLORS Employees

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

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

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

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

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

Mortality rates – JRS Employees

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

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

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

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

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

Net State Employee HIC OPEB Liability

The net OPEB liability (NOL) for the State Employee Health Insurance Credit Program represents the program's total OPEB liability determined in accordance with GASB Statement No. 74, less the associated fiduciary net position. As of June 30, 2017, NOL amounts for the VRS State Employee Health Insurance Credit Program is as follows (amounts expressed in thousands):

State Employee HIC OPEB Plan	
Total State Employee HIC OPEB Liability	*$990,028*
Plan Fiduciary Net Position	*79,516*
State Employee net HIC OPEB Liability (Asset)	*$910,512*
Plan Fiduciary Net Position as a Percentage of the Total State Employee HIC OPEB Liablity	*8.03%*

The total State Employee HIC OPEB liability is calculated by the System's actuary, and the plan's fiduciary net position is reported in the System's financial statements. The net State Employee HIC OPEB liability is disclosed in accordance with the requirements of GASB Statement No. 74 in the System's notes to the financial statements and required supplementary information.

Long-Term Expected Rate of Return

The long-term expected rate of return on VRS 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 VRS System investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimate of arithmetic real rates of return for each major asset class are summarized in the following table:

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

** The above allocation provides a one-year return of 7.30%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 6.83%, including expected inflation of 2.50%.*

Discount Rate

The discount rate used to measure the total State Employee HIC OPEB was 7.00%. The projection of cash flows used to determine the discount rate assumed that employer contributions will be made in accordance with the VRS funding policy at rates equal to the actuarially determined contribution rates adopted by the VRS Board of Trustees. Through the fiscal year ending June 30, 2019, the rate contributed by the state agency for the VRS State Employee Health Insurance Credit Program will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly. From July 1, 2019 on, all agencies are assumed to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the State Employee HIC OPEB 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 State Employee HIC OPEB liability.

Sensitivity of the Virginia Lottery's Proportionate Share of the State Employee HIC Net OPEB Liability to Changes in the Discount Rate

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

VIRGINIA LOTTERY'S PROPORTIONATE SHARE OF THE VRS STATE EMPLOYEE HIC OPEB PLAN NET HIC OPEB LIABILITY

1% Decrease (6.00%)	*Current Discount Rate (7.00%)*	*1% Increase (8.00%)*
$2,877,000	*$2,602,000*	*$2,365,000*

State Employee HIC OPEB Fiduciary Net Position

Detailed information about the VRS State Employee Health Insurance Credit Program's Fiduciary Net Position is available in the separately issued VRS 2017 Comprehensive Annual Financial Report (CAFR). A copy of the 2017 VRS CAFR may be downloaded from the VRS website at **http://www.varetire.org/Pdf/Publications/2017-annual-report.pdf**, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

General Information about the VRS Disability Insurance Program

Plan Description

All full-time and part-time permanent salaried state employees who are covered under the Virginia Retirement System (VRS), the State Police Officers' Retirement System (SPORS), or the Virginia Law Officers' Retirement System (VaLORS) hired on or after January 1, 1999 are automatically covered by the Disability Insurance Program (VSDP) upon employment. The Disability Insurance Program also covers state employees hired before January 1, 1999 who elected to transfer to VSDP rather than retain their eligibility to be considered for disability retirement. This plan is administered by the Virginia Retirement System (the System), along with pensions and other OBEB plans, for public employer groups in the Commonwealth of Virginia.

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

DISABILITY INSURANCE PROGRAM (VSDP) PLAN PROVISIONS
Eligible Employees The Virginia Sickness and Disability Program (VSDP), also known as the Disability Insurance Trust Fund was established January 1, 1999 to provide short-term and long-term disability benefits for non-work-related and work-related disabilities. Eligible employees are enrolled automatically upon employment. They include: ● Full-time and part-time permanent salaried state employees covered under VRS, SPORS and ValORS (members new to VaLORS following its creation on October 1, 1999, have been enrolled since the inception of VSDP). ● State employees hired before January 1, 1999, who elected to transfer to VSDP rather than retain their eligibility to be considered for VRS disability retirement. ● Public college and university faculty members who elect the VRS defined benefit plan. They may participate in VSDP or their institution's disability program, if offered. If the institution does not offer the program or the faculty member does not make an election, he or she is enrolled in VSDP.

Benefit Amounts

The Virginia Sickness and Disability Program (VSDP) provides the following benefits for eligible employees:

- **Leave** – Sick, family and personal leave. Eligible leave benefits are paid by the employer.
- **Short-Term Disability** – The program provides a short-term disability benefit beginning after a seven-calendar-day waiting period from the first day of disability. The benefit provides income replacement beginning at 100% of the employee's pre-disability income, reducing to 80% and then 60% based on the period of the disability and the length of service of the employee. Short-term disability benefits are paid by the employer.
- **Long-Term Disability** – The program provides a long-term disability benefit beginning after 125 workdays of short-term disability and continuing until the employee reaches his or her normal retirement age. The benefit provides income replacement of 60% of the employee's pre-disability income. If an employee becomes disabled within five years of his or her normal retirement age, the employee will receive up to five years of VSDP benefits, provided he or she remains medically eligible. Long-term disability benefits are paid for by the Virginia Disability Insurance Program (VSDP) OPEB Plan.
- **Income Replacement Adjustment** – The program provides for an income replacement adjustment to 80% for catastrophic conditions.
- **VSDP Long-Term Care Plan** – The program also includes a self-funded long-term care plan that assists with the cost of covered long-term care services.

Disability Insurance Program (VSDP) Plan Notes:

- Employees hired or rehired on or after July 1, 2009, must satisfy eligibility periods before becoming eligible for non-work-related short-term disability benefits and certain income-replacement levels.
- A state employee who is approved for VSDP benefits on or after the date that is five years prior to his or her normal retirement date is eligible for up five years of VSDP benefits.
- Employees on work-related short-term disability receiving only a workers' compensation payment may be eligible to purchase service credit for this period if retirement contributions are not being withheld from the workers' compensation payment. The rate will be based on 5.00% of the employee's compensation.

Cost-of-Living Adjustment (COLA)

- During periods an employee receives long-term disability benefits, the LTD benefit may be increased annually by an amount recommended by the actuary and approved by the Board.
  - Plan 1 employees vested as of 1/1/2013 – 100% of the VRS Plan 1 COLA (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%).
  - Plan 1 employee non-vested as of 1/1/2013, Plan 2 and Hybrid Plan employees – 100% of the VRS Plan 2 and Hybrid COLA (The first 2% increase in the Consumer Price Index for all Urban Consumers (CPI-U) and half of any additional increase (up to 2%) up to a maximum COLA of 3%).
- For participating full-time employees taking service retirement, the creditable compensation may be increased annually by an amount recommended by the actuary and approved by the Board, from the date of the commencement of the disability to the date of retirement.
  - 100% of the increase in the pay over the previous plan year for continuing VSDP members in the State, SPORS and VaLORS Plans, with a maximum COLA of 4.00%
- For participating full-time employees receiving supplemental (work-related) disability benefits, the creditable compensation may be increased annually by an amount recommended by the actuary and approved by the Board, from the date of the commencement of the disability to the date of retirement
  - 100% of the increase in the pay over the previous plan year for continuing VSDP members in the State, SPORS and VaLORS Plans, with a maximum COLA of 4.00%.

Contributions

The contribution requirements for the Disability Insurance Program (VSDP) are governed by §51.1-1140 of the *Code of Virginia*, as amended, but may be impacted as a result of funding provided to state agencies by the Virginia General Assembly. Each employer's contractually required employer contribution rate for the Disability Insurance Program (VSDP) for the year ended June 30, 2018 was 0.66% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2015. The actuarially determined rate was expected to finance the costs of benefits payable during the year, with an adjustment to amortize the accrued OPEB assets. Contributions to the Disability Insurance Program (VSDP) from the Virginia Lottery were $127,390 and $114,329 for the years ended June 30, 2018 and June 30, 2017, respectively.

Disability Insurance Program (VSDP) OPEB Liabilities (Assets), VSDP OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to the VSDP OPEB

At June 30, 2018, the Virginia Lottery reported a liability (asset) of ($943,000) for its proportionate share of the Net VSDP OPEB Liability (Asset). The Net VSDP OPEB Liability (Asset) was measured as of June 30, 2017 and the total VSDP OPEB liability used to calculate the Net VSDP OPEB Liability (Asset) was determined by an actuarial valuation as of that date. The Virginia Lottery's proportion of the Net VSDP OPEB Liability (Asset) was based on the Virginia Lottery's actuarially determined employer contributions to the VSDP OPEB plan for the year ended June 30, 2017 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2017, the Virginia Lottery's proportion was 0.45917% as compared to 0.46575% at June 30, 2016.

For the year ended June 30, 2018, the Virginia Lottery recognized VSDP OPEB expense of $127,390. Since there was a change in proportionate share between measurement dates, a portion of the VSDP OPEB expense was related to deferred amounts from changes in proportion.

At June 30, 2018, the Virginia Lottery reported deferred outflows of resources and deferred inflows of resources related to the VSDP OPEB from the following sources:

	Deferred Outflows Of Resources	Deferred Inflows Of Resources
Differences between expected and actual experience	-	-
Net difference between projected and actual earnings on VSDP OPEB plan investments	-	$74,000
Change in assumptions	-	71,000
Changes in proportion	$10,000	-
Employer contributions subsequent to the measurement date	117,390	
Total	$127,390	$145,000

$127,390 reported as deferred outflows of resources related to the VSDP OPEB resulting from the Virginia Lottery's contributions subsequent to the measurement date will be recognized as an adjustment of the Net VSDP OPEB Liability (Asset) in the Fiscal Year ending June 30, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the VSDP OPEB will be recognized in VSDP OPEB expense in future reporting periods as follows:

Year Ended June 30	Total
2019	($27,000)
2020	($27,000)

(Chart continued on next page)

Year Ended June 30	Total
2021	*$(27,000)*
2022	*$(27,000)*
2023	*$(9,000)*
Thereafter	*$(18,000)*

Actuarial Assumptions

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

Inflation	Salary Increases, Including Inflation	Investment Rate Of Return Expense, Including Inflation*
2.5%	*General state employees 3.5% – 5.35%* *SPORS employees 3.5% – 4.75%* *VaLORS employees 3.5% – 4.75%*	*7.0%, net of pension plan investment*

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

Mortality Rates-General State Employees

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

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

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

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

Mortality rates (Pre-retirement, post- 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*
Line of Duty Disability	*Increase rate from 14% to 25%*

Mortality rates – SPORS Employees

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

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

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

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

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

Mortality rates – VaLORS Employees

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

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

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

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

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

Net VSDP OPEB Liability (Asset)

The net OPEB asset (NOA) for the Disability Insurance Program (VSDP) represents the program's total OPEB liability determined in accordance with GASB Statement No. 74, less the associated fiduciary net position. As of June 30, 2017, NOA amounts for the Disability Insurance Program (VSDP) is as follows (amounts expressed in thousands):

Disability Insurance Program	
Total VSDP OPEB Liability	*$237,013*
Plan Fiduciary Net Position	*442,334*
Employers' Net OPEB Liability (Asset)	*($205,321)*
Plan Fiduciary Net Position as a Percentage of the Total VSDP OPEB Liability	*186.63%*

Long-Term Expected Rate of Return

The long-term expected rate of return on 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 VRS System investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimate of arithmetic real rates of return for each major asset class are summarized in the following table:

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

** The above allocation provides a one-year return of 7.30%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 6.83%, including expected inflation of 2.50%.*

Discount Rate

The discount rate used to measure the total VSDP OPEB liability was 7.00%. The projection of cash flows used to determine the discount rate assumed that employer contributions will be made per the VRS Statutes and that they will be made in accordance with the VRS funding policy and at rates equal to the actuarially determined contribution rates adopted by the VRS Board of Trustees. Through the fiscal year ending June 30, 2019, the rate contributed by participating employers to the VSDP OPEB Program will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly. From July 1, 2019 on, participating employers are assumed to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the VSDP OPEB

Program'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 VSDP OPEB liability.

Sensitivity of the Virginia Lottery's Proportionate Share of the Net VSDP OPEB Liability (Asset) to Changes in the Discount Rate

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

VIRGINIA LOTTERY'S PROPORTIONATE SHARE OF THE VSDP NET OPEB LIABILITY (ASSET)

1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
($897,000)	($943,000)	($1,022,000)

VSDP OPEB Fiduciary Net Position

Detailed information about the Disability Insurance Program (VSDP) Fiduciary Net Position is available in the separately issued VRS 2017 Comprehensive Annual Financial Report (CAFR). A copy of the 2017 VRS CAFR may be downloaded from the VRS website at **http://www.varetire.org/Pdf/Publications/2017-annual-report.pdf**, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

General Information about the Group Life Insurance Program

Plan Description

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

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

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

GROUP LIFE INSURANCE PROGRAM PLAN PROVISIONS
Eligible Employees The Group Life Insurance Program was established July 1, 1960, for state employees, teachers and employees of political subdivisions that elect the program, including the following employers that do not participate in VRS for retirement: • City of Richmond • City of Portsmouth • City of Roanoke • City of Norfolk • Roanoke City Schools Board Basic group life insurance coverage is automatic upon employment. Coverage end for employees who leave their position before retirement eligibility or who take a refund of their member contributions and accrued interest.

Benefit Amounts The benefits payable under the Group Life Insurance Program have several components. ● **Natural Death Benefit** – The natural death benefit is equal to the employee's covered compensation rounded to the next highest thousand and then doubled. ● **Accidental Death Benefit** – The accidental death benefit is double the natural death benefit. ● **Other Benefit Provisions** – In addition to the basic natural and accidental death benefits, the program provides additional benefits provided under specific circumstances. These include: ● Accidental dismemberment benefit ● Safety belt benefit ● Repatriation benefit ● Felonious assault benefit ● Accelerated death benefit option.
Reduction in benefit Amounts The benefit amounts provided to members covered under the Group Life Insurance Program are subject to a reduction factor. The benefit amount reduces by 25% on January 1 following one calendar year of separation. The benefit amount reduces by an additional 25% on each subsequent January 1 until it reaches 25% of its original value.
Minimum Benefit Amount and Cost-of-Living Adjustment (COLA) For covered members with at least 30 years of creditable service, there is a minimum benefit payable under the Group Life Insurance Program. The minimum benefit was set at $8,000 by statute. This amount is increased annually based on the VRS Plan 2 cost-of-living adjustment and is currently $8,111.

Contributions

The contribution requirements for the Group Life Insurance Program are governed by §51.1-506 and §51.1-508 of the *Code of Virginia*, as amended, but may be impacted as a result of funding provided to state agencies and school divisions by the Virginia General Assembly. The total rate for the Group Life Insurance Program was 1.31% of covered employee compensation. This was allocated into an employee and an employer component using a 60/40 split. The employee component was 0.79% (1.31% X 60%) and the employer component was 0.52% (1.31% X 40%). Employers may elect to pay all or part of the employee contribution, however the employer must pay all of the employer contribution. Each employer's contractually required employer contribution rate for the year ended June 30, 2018 was 0.52% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2015. The actuarially determined rate, when combined with employee contributions, was expected to finance the costs of benefits payable during the year, with an additional amount to finance any unfunded accrued liability. Contribution to the Group Life Insurance Program from the Virginia Lottery were $98,528 and $97,610 for the years ended June 30, 2018 and June 30, 2017, respectively.

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

At June 30, 2018, the Virginia Lottery reported a liability of $1,532,000 for its proportionate share of the Net GLI OPEB Liability. The Net GLI OPEB Liability was measured as of June 30, 2017 and the total GLI OPEB liability used to calculate the Net GLI OPEB Liability was determined by an actuarial valuation as of that date. The Virginia Lottery's proportion of the Net GLI OPEB Liability was based on the Virginia Lottery's actuarially determined employer contributions to the Group Life Insurance Program for the year ended June 30, 2017 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2017, the participating employer's proportion was 0.10177% as compared to 0.10298% at June 30, 2016.

For the year ended June 30, 2018, the Virginia Lottery recognized GLI OPEB expense of $98,528. Since there was a change in proportionate share between measurement dates, a portion of the GLI OPEB expense was related to deferred amounts from changes in proportion.

At June 30, 2018, the Virginia Lottery reported deferred outflows of resources and deferred inflows of resources related to the GLI OPEB from the following sources:

	Deferred Outflows Of Resources	Deferred Inflows Of Resources
Differences between expected and actual experience	-	$33,000
Net difference between projected and actual earnings on GLI OPEB program investments	-	58,000
Change in assumptions	-	79,000
Changes in proportion	-	18,000
Employer contributions subsequent to the measurement date	98,528	-
Total	$98,528	$188,000

$98,528 reported as deferred outflows of resources related to the GLI OPEB resulting from the Virginia Lottery's contributions subsequent to the measurement date will be recognized as a reduction of the Net GLI OPEB Liability in the Fiscal Year ending June 30, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the GLI OPEB will be recognized in the GLI OPEB expense in future reporting periods as follows:

Year Ended June 30	Total
2019	$(38,000)
2020	$(38,000)
2021	$(38,000)
2022	$(38,000)
2023	$(24,000)
Thereafter	$(12,000)

Actuarial Assumptions

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

Inflation	Salary Increases, Including Inflation		Investment Rate Of Return Expense, Including Inflation*
2.5%	General state employees	3.50% – 5.35%	7.0%, net of pension plan investment*
	Teachers	3.50% – 5.95%	
	SPORS employees	3.50% – 4.75%	
	VaLORS employees	3.50% – 4.75%	
	JRS employees	4.5%	
	Locality-General employees	3.50% – 5.35%	
	Locality-Hazardous Duty	3.50% – 4.75%	

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

Mortality Rates-General State Employees

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

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

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

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

Mortality rates (Pre-retirement, post- retirement healthy, and disabled	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
Line of Duty Disability	Increase rate from 14% to 25%

Mortality Rates-Teachers

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

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

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

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

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

Mortality rates – SPORS Employees

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

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

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

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

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

Mortality rates – VaLORS Employees

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

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

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

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

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

Mortality rates – JRS Employees

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

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

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

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

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

Mortality rates – Largest Ten Locality Employers - General Employees

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

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

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

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

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

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

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

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

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

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

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

Mortality rates – Largest Ten Locality Employers – Hazardous Duty Employees

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

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

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

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

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

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

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

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

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

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

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

Net GLI OPEB Liability

The net OPEB liability (NOL) for the Group Life Insurance Program represents the program's total OPEB liability determined in accordance with GASB Statement No. 74, less the associated fiduciary net position. As of June 30, 2017, NOL amounts for the Group Life Insurance Program is as follows (amounts expressed in thousands):

Group Life Insurance OPEB Program	
Total GLI OPEB Liability	*$2,942,426*
Plan Fiduciary Net Position	*1,437,586*
Employers' Net GLI OPEB Liability (Asset)	*$1,504,840*
Plan Fiduciary Net Position as a Percentage of the Total GLI OPEB Liability	*48.86%*

The total GLI OPEB liability is calculated by the System's actuary, and each plan's fiduciary net position is reported in the System's financial statements. The net GLI OPEB liability is disclosed in accordance with the requirements of GASB Statement No. 74 in the System's notes to the financial statements and required supplementary information.

Long-Term Expected Rate of Return

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

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

** The above allocation provides a one-year return of 7.30%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 6.83%, including expected inflation of 2.50%.*

Discount Rate

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

Sensitivity of the Virginia Lottery's Proportionate Share of the Net GLI OPEB Liability to Changes in the Discount Rate

The following presents the Virginia Lottery's proportionate share of the net GLI OPEB liability using the discount rate of 7.00%, as well as what the employer's proportionate share of the net GLI OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (6.00%) or one percentage point higher (8.00%) than the current rate:

VIRGINIA LOTTERY'S PROPORTIONATE SHARE OF THE GROUP LIFE INSURANCE PROGRAM NET OPEB LIABILITY

1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
$1,981,000	$1,532,000	$1,167,000

Group Life Insurance Program Fiduciary Net Position

Detailed information about the Group Life Insurance Program's Fiduciary Net Position is available in the separately issued VRS 2017 Comprehensive Annual Financial Report (CAFR). A copy of the 2017 VRS CAFR may be downloaded from the VRS website at **http://www.varetire.org/Pdf/Publications/2017-annual-report.pdf**, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

Pre-Medicare Retiree Healthcare

Plan Description

The Commonwealth provides a healthcare plan established by Title 2.2, Chapter 28 of the Code of Virginia for retirees who are not yet eligible to participate in Medicare. For a retiree to participate in the Plan, the participant must be eligible for a monthly annuity from the VRS or a periodic benefit from one of the qualified Optional Retirement Plan (ORP) vendors, and:

- be receiving (not deferring) the annuity or periodic benefit immediately upon retirement;
- have his or her last employer before retirement be the state;
- be eligible for coverage as an active employee in the State Health Benefits Program until his or her retirement date (not including Extended Coverage); and,
- have submitted within 31 days of his or her retirement date an Enrollment Form to his or her Benefits Administrator to enroll.

The employer does not pay a portion of the retirees' healthcare premium; however, since both active employees and retirees are included in the same pool for purposes of determining health insurance rates, this generally results in a higher rate for active employees. Therefore, the employer effectively subsidizes the costs of the participating retirees' healthcare through payment of the employer's portion of the premiums for active employees.

This fund is reported as part of the Commonwealth's Healthcare Internal Service Fund. Benefit payments are recognized when due and payable in accordance with the benefit terms. Pre-Medicare Retiree Healthcare is a single-employer defined benefit OPEB plan that is treated like a cost-sharing plan for financial reporting purposes, and is administered by the Department of Human Resource Management. There were approximately 5,600 retirees and 91,000 active employees in the program in fiscal year 2017. There are no inactive employees entitled to future benefits who are not currently receiving benefits. There are no assets accumulated in a trust to pay benefits.

Actuarial Assumptions and Methods

The total Pre-Medicare Retiree Healthcare OPEB liability was based on an actuarial valuation with a valuation date of June 30, 2017. The Department of Human Resource Management selected the economic, demographic and healthcare claim cost assumptions. The actuary provided guidance with respect to these assumptions. Initial healthcare costs trend rates used were 8.62 percent for medical and pharmacy and 4.0 percent for dental. The ultimate trend rates used were 5.0 percent for medical and pharmacy and 4.0 percent for dental.

Valuation Date	Actuarially determined contribution rates are calculated as of June 30, one year prior to the end of the fiscal year in which contributions are reported.
Measurement Date	June 30, 2017 (one year prior to the end of the fiscal year)
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level dollar, Closed
Effective Amortization Period	6.43 years
Discount Rate	3.58%
Projected Salary Increases	4.0%
Medical Trend Under 65	Medical & Rx: 8.62% to 5.00% Dental: 4.00% Before reflecting Excise tax
Year of Ultimate Trend	2025
Mortality	Mortality rates vary by participant status
Pre-Retirement:	RP-2014 Employee Rates to age 80, Healthy Annuitant Rates at ages 81 and older projected with Scale BB to 2020; males setback 1 year, 85% of rates; females setback 1 year
Post-Retirement:	RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with Scale BB to 2020; males set forward 1 year; females setback 1 year with 1.5% increase compounded from ages 70 to 85
Post-Disablement:	RP-2014 Disabled Mortality Rates projected with Scale BB to 2020; males 115% of rates; females 130% of rates

The discount rate was based on the Bond Buyers GO 20 Municipal Bond Index as of the measurement date which is June 30, 2017.

Changes of Assumptions: The following assumptions were updated since the July 1, 2016 valuation based on the results of a Virginia Retirement System actuarial experience study performed for the period of July 1, 2012 through June 30, 2016. Changes to the actuarial assumptions as a result of the experience study are as follows:

- Mortality rates -updated to a more current mortality table – RP-2014 projected to 2020
- Retirement rates - lowered rates at older ages and changed final retirement from 70 to 75
- Withdrawal rates - adjusted rates to better fit experience at each year age and service through 9 years of service

The discount rate was increased from 2.85% to 3.58% based on the Bond Buyers GO 20 Municipal Bond Index. Spousal coverage was reduced from 70% to 50% based on a blend of recent spousal coverage election rates and the prior year assumption. Based on the 2017 census, new retirees since 1/1/2015 have chosen to cover their spouses approximately 20% of the time. However, active employees cover their spouses at a rate close to 53%.

Pre-Medicare Retiree Healthcare OPEB Liabilities, OPEB Expense, and Deferred Outflow of Resources and Deferred Inflows of Resources

At June 30, 2018, the Virginia Lottery reported a liability of $4,126,329 for its proportionate share of the collective total Pre-Medicare Retiree Healthcare OPEB liability of $1.3 billion. The Pre-Medicare Retiree Healthcare OPEB liability was measured as of June 30, 2017 and was determined by an actuarial valuation as of June 30, 2017. The Virginia Lottery's proportion of the Pre-Medicare Retiree Healthcare OPEB liability was based on each employer's healthcare premium contributions as a percentage of the total employer's healthcare premium contributions for all participating employers. At June 30, 2017, the Virginia Lottery's proportion was 0.31768% as compared to 0.31912% at June 30, 2016. For the year ended June 30, 2018, the Virginia Lottery's recognized Pre-Medicare Retiree Healthcare OPEB expense of $325,734.

At June 30, 2018, the Virginia Lottery's reported deferred outflows or resources and deferred inflows of resources related to Pre-Medicare Retiree Healthcare from the following sources:

	Deferred Outflows Of Resources	Deferred Inflows Of Resources
Differences between expected and actual experience	-	$165,967
Change in assumptions	-	874,786
Changes in proportion	-	19,029
Employer contributions subsequent to the measurement date	$109,426	-
Total	$109,426	$1,059,782

$109,426 reported as deferred outflows of resources related to the Pre-Medicare Retiree Healthcare OPEB resulting from amounts associated with transactions subsequent to the measurement date will be recognized as a reduction of the total OPEB Liability in the fiscal year ending June 30, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the PreMedicare Retiree Healthcare OPEB will be recognized in the Pre-Medicare Retiree Healthcare OPEB expense as follows:

Year Ended June 30	Total
2019	$(195,172)
2020	$(195,172)
2021	$(195,172)
2022	$(195,172)
2023	$(195,172)
Thereafter	$ (83,922)

Sensitivity of the Virginia Lottery's Share of the OPEB Liability to Changes in the Discount Rate

The following presents the Virginia Lottery's proportionate share of the Pre-Medicare Retiree Healthcare OPEB liability using the discount rate of 3.58%, as well as what the employer's proportionate share of the PreMedicare Retiree Healthcare OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (2.58%) or one percentage point higher (4.58%) than the current rate:

	1% Decrease (2.58%)	Current Discount Rate (3.58%)	1% Increase (4.58%)
OPEB Liability	$4,420,240	$4,126,329	$3,844,731

Sensitivity of the Virginia Lottery's Proportionate Share of the OPEB Liability to Changes in the Healthcare Cost Trend Rates

The following presents the Virginia Lottery's proportionate share of the Pre-Medicare Retiree Healthcare OPEB liability using healthcare cost trend rate of 8.62% decreasing to 5%, as well as what the employer's proportionate share of the Pre-Medicare Retiree Healthcare OPEB liability would be if it were calculated using a healthcare cost trend rate that is one percentage point lower (7.62% decreasing to 4.0%) or one percentage point higher (9.62% decreasing to 6.0%) than the current rate:

	1% Decrease (7.62% decreasing to 4.00%)	Trend Rate (8.62% decreasing to 5.00%)	1% Increase (9.62% decreasing to 6.00%)
OPEB Liability	$3,671,386	$4,126,329	$4,659,660

General Information about the Line of Duty Act Program

Plan Description

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

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

LINE OF DUTY ACT PROGRAM (LODA) PLAN PROVISIONS
Eligible Employees The eligible employees of the Line of Duty Act Program (LODA) are paid employees and volunteers in hazardous duty positions in Virginia localities and hazardous duty employees who are covered under the Virginia Retirement System (VRS), the State Police Officers' Retirement System (SPORS), or the Virginia Law Officers' Retirement System (VaLORS).
Benefit Amounts The Line of Duty Act Program (LODA) provides death and health insurance benefits for eligible individuals: ● **Death** – The Line of Duty Act program death benefit is a one-time payment made to the beneficiary or beneficiaries of a covered individual. Amounts vary as follows: ● $100,000 when a death occurs as the direct or proximate result of performing duty as of January 1, 2006, or after. ● $25,000 when the cause of death is attributed to one of the applicable presumptions and occurred earlier than five years after the retirement date. ● An additional $20,000 benefit is payable when certain members of the National Guard and U.S. military reserves are killed in action in any armed conflict on or after October 7, 2001.

- **Health Insurance** – The Line of Duty Act program provides health insurance benefits.
    - Prior to July 1, 2017, these benefits were managed through the various employer plans and maintained the benefits that existed prior to the employee's death or disability. These premiums were reimbursed to the employer by the LODA program.
    - Beginning July 1, 2017, the health insurance benefits are managed through the Virginia Department of Human Resource Management (DHRM). The health benefits are modeled after the State Employee Health benefits Program plans and provide consistent, premium-free continued health plan coverage for LODA-eligible disabled individuals, survivors and family members. Individuals receiving the health insurance benefits must continue to meet eligibility requirements as defined by the Line of Duty Act.

Contributions

The contribution requirements for the Line of Duty Act Program (LODA) are governed by §9.1-400.1 of the *Code of Virginia*, as amended, but may be impacted as a result of funding provided to state agencies by the Virginia General Assembly. Each employer's contractually required employer contribution rate for the Line of Duty Act Program (LODA) for the year ended June 30, 2018 was $567.37 per covered full-time-equivalent employee. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2015 and represents the pay-as-you-go funding rate and not the full actuarial cost of the benefits under the program. The actuarially determined pay-as-you-go rate was expected to finance the costs and related expenses of benefits payable during the year. Contributions to the Line of Duty Act Program (LODA) from the Virginia Lottery were $3,404 and $3,404 for the years ended June 30, 2018 and June 30, 2017, respectively.

Line of Duty Act Program (LODA) OPEB Liabilities, LODA OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to the LODA OPEB

At June 30, 2018, the Virginia Lottery reported a liability of $83,000 for its proportionate share of the Net LODA OPEB Liability. The Net LODA OPEB Liability was measured as of June 30, 2017 and the total LODA OPEB liability used to calculate the Net LODA OPEB Liability was determined by an actuarial valuation as of that date. The Virginia Lottery's proportion of the Net LODA OPEB Liability was based on the entity's actuarially determined pay-as-you-go employer contributions to the LODA OPEB plan for the year ended June 30, 2017 relative to the total of the actuarially determined pay-as-you-go employer contributions for all participating employers. At June 30, 2017, the Virginia Lottery's proportion was 0.3516% as compared to 0.3190% at June 30, 2016.

For the year ended June 30, 2018, the Virginia Lottery recognized LODA OPEB expense of $3,404, Since there was a change in proportionate share between measurement dates, a portion of the LODA OPEB expense was related to deferred amounts from changes in proportion.

At June 30, 2018, the Virginia Lottery reported deferred outflows of resources and deferred inflows of resources related to the LODA OPEB from the following sources:

	Deferred Outflows Of Resources	Deferred Inflows Of Resources
Differences between expected and actual experience	-	-
Net difference between projected and actual earnings on LODA OPEB program investments	-	-
Change in assumptions	-	*$9,000*
Changes in proportion	-	-
Employer contributions subsequent to the measurement date	*$3,404*	-
Total	*$3,404*	*$9,000*

$3,404 reported as deferred outflows of resources related to the LODA OPEB resulting from the Virginia Lottery's contributions subsequent to the measurement date will be recognized as a reduction of the Net LODA OPEB Liability in the Fiscal Year ending June 30, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the LODA OPEB will be recognized in LODA OPEB expense in future reporting periods as follows:

Year Ended June 30	Total
2019	*$(1,000)*
2020	*$(1,000)*
2021	*$(1,000)*
2022	*$(1,000)*
2023	*$(1,000)*
Thereafter	*$(4,000)*

Actuarial Assumptions

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

Inflation	Salary Increases, Including Inflation	Medical cost trend rates assumptions	Investment Rate Of Return
2.50%	*General state employees 3.50% – 5.35% SPORS employees 3.50% – 4.75% VaLORS employees 3.50% – 4.75% Locality employees 3.50% – 4.75%*	*Under Age 65 7.75% – 5.00% Ages 65 and older 5.75% – 5.00%*	*3.56% net of OPEB 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 3.56%. However, since the difference was minimal, a more conservative 3.56% investment return assumption has been used. Since LODA is funded on a current-disbursement basis, the assumed annual rate of return of 3.56% was used since it approximates the risk-free rate of return.*

Mortality Rates-General State Employees

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

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

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

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

Mortality rates (Pre-retirement, post- 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*
Line of Duty Disability	*Increase rate from 14% to 25%*

Mortality rates – SPORS Employees

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

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

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

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

Mortality rates (Pre-retirement, post- retirement healthy, and disabled	*Updated to a more current mortality table – RP-2014 projected to 2020 and reduced margin for future improvement in accordance with experience*
Retirement Rates	*Increased age 50 rates and lowered rates at older ages*
Withdrawal Rates	*Adjusted rates to better fit experience*

Disability Rates	*Adjusted rates to better match experience*
Salary Scale	*No change*
Line of Duty Disability	*Increase rate from 60% to 85%*

Mortality rates – VaLORS Employees

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

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

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

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

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

Mortality rates – Largest Ten Locality Employers With Public Safety Employees

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

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

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

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

Mortality rates (Pre-retirement, post- retirement healthy, and disabled	*Updated to a more current mortality table – RP-2014 projected to 2020*
Retirement Rates	*Lowered retirement rates at older ages*
Withdrawal Rates	*Adjusted termination rates to better fit experience at each year age and service year*

Disability Rates	*Increased disability rates*
Salary Scale	*No change*
Line of Duty Disability	*Increase rate from 60% to 70%*

Mortality rates – Non-Largest Ten Locality Employers With Public Safety Employees

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

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

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

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

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

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

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

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

Net LODA OPEB Liability

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

Line of Duty Act Program	
Total LODA OPEB Liability	*$266,252*
Plan Fiduciary Net Position	*3,461*
Employers' Net OPEB Liability (Asset)	*$262,791*
Plan Fiduciary Net Position as a Percentage of the Total LODA OPEB Liability	*1.30%*

Long-Term Expected Rate of Return

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

Discount Rate

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

Sensitivity of the Virginia Lottery's Proportionate Share of the Net LODA OPEB Liability to Changes in the Discount Rate

The following presents the Virginia Lottery's proportionate share of the net LODA OPEB liability using the discount rate of 3.56%, as well as what the covered employer's proportionate share of the net LODA OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (2.56%) or one percentage point higher (4.56%) than the current rate:

VIRGINIA LOTTERY'S PROPORTIONATE SHARE OF THE TOTAL LODA NET OPEB LIABILITY

1% Decrease (2.56%)	*Current Discount Rate (3.56%)*	*1% Increase (4.56%)*
$94,000	*$83,000*	*$74,000*

Sensitivity of the Virginia Lottery's Proportionate Share of the Net LODA OPEB Liability to Changes in the Health Care Trend Rate

Because the Line of Duty Act Program (LODA) contains a provisions for the payment of health insurance premiums, the liabilities are also impacted by the health care trend rates. The following presents the Virginia Lottery's proportionate share of the net LODA OPEB liability using health care trend rate of 7.75% decreasing to 5.00%, as well as what the covered employer's proportionate share of the net LODA OPEB liability would be if it were calculated using a health care trend rate that is one percentage point lower (6.75% decreasing to 4.00%) or one percentage point higher (8.75% decreasing to 6.00%) than the current rate:

VIRGINIA LOTTERY'S PROPORTIONATE SHARE OF THE TOTAL LODA NET OPEB LIABILITY

	1% Decrease (76.75% decreasing to 4.00%)	Health Care Trend Rate (7.75% decreasing to 5.00%)	1% Increase (8.75% decreasing to 6.00%)
OPEB Liability	*$70,000*	*$83,000*	*$99,000*

LODA OPEB Plan Fiduciary Net Position

Detailed information about the Line of Duty Act Program (LODA) Fiduciary Net Position is available in the separately issued VRS 2017 Comprehensive Annual Financial Report (CAFR). A copy of the 2017 VRS CAFR may be downloaded from the VRS website at **http://www.varetire.org/Pdf/Publications/2017-annual-report.pdf**, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

Required Supplementary Information

Schedule Of Virginia Lottery's Share Of Net Pension Liability VRS State Employee Retirement Plan For The Year Ended June 30, 2018, 2017, 2016 and 2015*

	2018	2017	2016	2015
Lottery's Proportion of the Net Pension Liability (Asset)	*0.46150%.*	*0.46485%*	*0.45999%*	*0.42957%*
Lottery's Proportionate Share of the Net Pension Liability (Asset)	*$26,894,000*	*$30,637,000*	*$28,163,000*	*$24,049,000*
Lottery's Covered Payroll	*$18,184,464*	*$18,124,580*	*$17,768,288*	*$17,124,458*
Lottery's Proportionate Share of the Net Pension Liability (Asset) as a Percentage of its Covered Payroll	*147.90%*	*169.04%*	*158.50%*	*140.43%*
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	*75.33%*	*71.29%*	*72.81%*	*74.28%*

Schedule is intended to show information for 10 years. Since 2018 is the fourth year for this presentation, only four years 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.*

Schedule Of Virginia Lottery Contributions VRS State Employee Retirement Plan For The Year Ended June 30, 2015 through 2018

	2018	2017	2016	2015
Contractually Required Contribution	*$2,568,329*	*$2,453,084*	*$2,535,629*	*$2,190,830*
Contributions in Relation to Contractually Required Contribution	*$2,453,144*	*$2,431,045*	*$2,525,034*	*$2,161,142*
Contribution Deficiency (Excess)	*$115,185*	*$22,039*	*$10,595*	*$29,688*
Lottery's Covered Payroll	*$19,038,760*	*$18,184,464*	*$18,124,580*	*$17,768,288*
Contributions as a Percent of Covered Payroll	*12.88%*	*13.37%*	*13.93%*	*12.16%*

Virginia Lottery Notes To Required Supplementary Information For The Year Ended June 30, 2018

Changes of benefit terms – There have been no actuarially material changes to the System benefit provisions since the prior actuarial valuation. The 2014 valuation includes Hybrid Retirement Plan members for the first time. The hybrid plan applies to most new employees hired on or after January 1, 2014 and not covered by enhanced hazardous duty benefits. Because this was a new benefit and the number of participants was relatively small, the impact on the liabilities as of the measurement date of June 30, 2017 are not material.

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

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*
Line of Duty Disability	*Increase rate from 14% to 25%*

Schedule of Virginia Lottery's Share of Net OPEB Liability Health Insurance Credit Program (HIC) For The Year Ended June 30,2018*

	2018
Lottery's Proportion of the Net HIC OPEB Liability (Asset)	*0.28574%*
Lottery's Proportionate Share of the Net HIC OPEB Liability (Asset)	*$2,602,000*
Lottery's Covered Payroll	*$18,184,464*
Lottery's Proportionate Share of the Net Pension HIC OPEB Liability (Asset) as a Percentageof its Covered Payroll	*14.31%*
Plan Fiduciary Net Position as a Percentage of the Total HIC OPEB Liability	*8.03%*

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

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

Schedule of Virginia Lottery's Contributions of Net OPEB Liability Healthcare Insurance Credit Program (HIC) For The Year Ended June 30,2018

	2018
Contractually Required Contribution	*$216,000*
Contributions in Relation to Contractually Required Contribution	*$221,644*
Contribution Deficiency (Excess)	*($5,644)*
Lottery's Covered Payroll	*$19,038,760*
Contributions as a Percent of Covered Payroll	*1.16%*

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

Virginia Lottery Notes To Required Supplementary Information For The Year Ended June 30, 2018

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

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

General State Employees:

Mortality rates (Pre-retirement, post- retirement healthy, and disabled	*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*
Line of Duty Disability	*Increase rate from 14% to 25%*

SPORS Employees:

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

VaLORS Employees:

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

JRS Employees:

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

Schedule of Virginia Lottery's Share of Net OPEB Liability Disability Insurance Program (VSDP) For The Year Ended June 30,2018*

	2018
Lottery's Proportion of the Net VSDP OPEB Liability (Asset)	*0.45917%*
Lottery's Proportionate Share of the Net VSDP OPEB Liability (Asset)	*($943,000)*
Employer's Covered Payroll	*$18,184,464*
Lottery's Proportionate Share of the Net VSDP OPEB Liability (Asset) as a Percentageof its Covered Payroll	*-5.19%*
Plan Fiduciary Net Position as a Percentage of the Total VSDP OPEB Liability	*186.63%*

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

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

Schedule of Virginia Lottery's Contributions of Net OPEB Liability Disability Program (VSDP) For The Year Ended June 30,2018

	2018
Contractually Required Contribution	*$80,000*
Contributions in Relation to Contractually Required Contribution	*$127,390*
Contribution Deficiency (Excess)	*($47,390)*
Lottery's Covered Payroll	*$19,038,760*
Contributions as a Percent of Covered Payroll	*0.67%*

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

Virginia Lottery Notes To Required Supplementary Information For The Year Ended June 30, 2018

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

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

General State Employees:

Mortality rates (Pre-retirement, post- retirement healthy, and disabled	*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*
Line of Duty Disability	*Increase rate from 14% to 25%*

SPORS Employees:

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

VaLORS Employees:

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

JRS Employees:

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

Schedule of Virginia Lottery's Share of Net OPEB Liability Group Life Insurance Program For The Year Ended June 30,2018*

	2018
Lottery's Proportion of the Net GLI OPEB Liability (Asset)	*0.10177%*
Lottery's Proportionate Share of the Net GLI OPEB Liability (Asset)	*$1,532,000*
Lottery's Covered Payroll	*$18,184,464*
Lottery's Proportionate Share of the Net GLI OPEB Liability (Asset) as a Percentageof its Covered Payroll	*8.42%*
Plan Fiduciary Net Position as a Percentage of the Total GLI OPEB Liability	*48.86%*

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

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

Schedule of Virginia Lottery's Contributions of Net OPEB Liability Group Life Insurance Program (GLI) For The Year Ended June 30,2018

	2018
Contractually Required Contribution	*$14,000*
Contributions in Relation to Contractually Required Contribution	*$98,528*
Contribution Deficiency (Excess)	*($84,528)*
Lottery's Covered Payroll	*$19,038,760*
Contributions as a Percent of Covered Payroll	*0.52%*

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

Virginia Lottery Notes To Required Supplementary Information For The Year Ended June 30, 2018

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

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

General State Employees:

Mortality rates (Pre-retirement, post- retirement healthy, and disabled	*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*
Line of Duty Disability	*Increase rate from 14% to 25%*

SPORS Employees:

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

VaLORS Employees:

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

JRS Employees:

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

Largest Ten Locality Employers - General Employees

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

Non-Largest Ten Locality Employers - General Employees

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

Largest Ten Locality Employers – Hazardous Duty Employees

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

Non-Largest Ten Locality Employers – Hazardous Duty Employees

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

Schedule of Virginia Lottery's Share of Net OPEB Liability Line of Duty Act Program (LODA) For The Year Ended June 30,2018*

	2018
Lottery's Proportion of the Net LODA OPEB Liability (Asset)	0.3516%
Lottery's Proportionate Share of the Net LODA OPEB Liability (Asset)	$83,000
Lottery's Covered Employee Payroll	$19,163,238
Lottery's Proportionate Share of the Net LODA OPEB Liability (Asset) as a Percentageof its Covered Employee Payroll	0.43%
Plan Fiduciary Net Position as a Percentage of the Total LODA OPEB Liability	1.30%

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

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

Schedule of Virginia Lottery's Contributions of Net OPEB Liability Line of Duty Act Program (LODA) For The Year Ended June 30,2018

	2018
Contractually Required Contribution	$6,000
Contributions in Relation to Contractually Required Contribution	$3,404
Contribution Deficiency (Excess)	$2,596
Lottery's Covered Employee Payroll	$20,499,286
Contributions as a Percent of Covered Employee Payroll	0.02%

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

Virginia Lottery Notes To Required Supplementary Information For The Year Ended June 30, 2018

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

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

General State Employees:

Mortality rates (Pre-retirement, post- retirement healthy, and disabled	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*
Line of Duty Disability	*Increase rate from 14% to 25%*

SPORS Employees:

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

VaLORS Employees:

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

Employees In The Largest Ten Locality Employers With Public Safety Employees

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

Employees In The Non- Largest Ten Locality Employers With Public Safety Employees

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

Schedule of Virginia Lottery's Share of Total OPEB Liability Pre-Medicare Retiree Healthcare Program For The Year Ended June 30,2018*

	2018
Lottery's Proportion of the PMRH OPEB Liability	*0.31768%*
Lottery's Proportionate Share of the PMRH OPEB Liability	*$4,126,329*
Lottery's Covered Employee Payroll	*$19,163,238*
Lottery's Proportionate Share of the PMRH OPEB Liability (Asset) as a Percentageof its Covered Employee Payroll	*21.53%*

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

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

Virginia Lottery Notes To Required Supplementary Information For The Year Ended June 30, 2018

There are no assets accumulated in a trust to pay related benefits.

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

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

General State Employees:

Mortality rates (Pre-retirement, post- retirement healthy, and disabled	*Updated to a more current mortality table – RP-2014 projected to 2020*
Retirement Rates	*Lowered rates at older ages and changed final retirement from 70 to 75*
Withdrawal Rates	*Adjusted rates to better fit experience at each year age and service through 9 years of service*

The discount rate was increased from 2.85% to 3.58% based on the Bond Buyers GO 20 Municipal Bond Index and spousal coverage was reduced from 70% to 50% based on a blend of recent spousal coverage election rates and the prior year assumption. Based on the 2017 census, new retirees since 1/1/2015 have chosen to cover their spouses approximately 20% of the time. However, active employees cover their spouses at a rate close to 53%.