# 2019 Commonwealth of Virginia Reporting Package as defined in 2 CFR 200.512(c)

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*Page number of this PDF, not the page number of the respective document*
A Comprehensive Annual Financial Report
For the Fiscal Year Ended June 30, 2019

Ralph S. Northam
Governor

Aubrey L. Layne, Jr.
Secretary of Finance

David A. Von Moll
Comptroller
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Comptroller’s Letter of Transmittal to the Governor
Certificate of Achievement for Excellence in Financial Reporting
Organization of Executive Branch of Government
Organization of Government – Selected Government Officials – Executive Branch
Organization of the Department of Accounts
December 13, 2019

The Honorable Ralph S. Northam  
Governor of the Commonwealth of Virginia  
State Capitol  
Richmond, Virginia 23219

Dear Governor Northam:

It is my pleasure to present the Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2019, in accordance with Section 2.2-813 of the Code of Virginia. This report consists of management’s representations concerning the Commonwealth of Virginia’s finances. Management assumes full responsibility for the completeness and reliability of all information presented. This report reflects my commitment to you, to the citizens of the Commonwealth, and to the financial community to maintain our financial statements in conformance with accounting principles generally accepted in the United States of America (GAAP) as established by the Governmental Accounting Standards Board (GASB). Data presented in this report is believed to be accurate in all material respects, and all disclosures that are necessary to enable the reader to obtain a thorough understanding of the Commonwealth’s financial activities have been included.

The 2019 CAFR is presented in three sections. The Introductory Section includes this transmittal letter and organization charts for state government. The Financial Section includes the State Auditor’s Report, management’s discussion and analysis (MD&A), audited government-wide and fund financial statements and notes thereto, required supplementary information other than MD&A, and the underlying combining and individual fund financial statements and supporting schedules. The Statistical Section sets forth selected unaudited economic, financial trend, and demographic information for the Commonwealth on a multi-year basis.

The Commonwealth’s management is responsible for the establishment and maintenance of internal accounting controls that ensure assets are safeguarded and financial transactions are properly recorded and adequately documented. To ensure that the costs of controls do not exceed the benefits obtained, management is required to use cost estimates and judgments to attain reasonable assurance as to the adequacy of such controls. The Commonwealth’s established internal controls fulfill these requirements and provide reasonable, but not absolute assurance, that the accompanying financial statements are free of material misstatement.

In accordance with Section 30-133 of the Code of Virginia, the Auditor of Public Accounts has audited the Commonwealth’s financial statements for the year ended June 30, 2019. The audit was conducted in accordance with auditing standards generally accepted in the United States of America and Government Auditing Standards issued by the Comptroller General of the United States. The auditor’s opinion is included in the Financial Section of this report. Audit testing for compliance with the U. S. Office of Management and Budget Compliance Supplement and the related Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards, is performed at the statewide level. The Commonwealth’s Single Audit Report will be issued at a later date. I would like to acknowledge the Auditor of Public Accounts’ staff for their many contributions to the preparation of this report.

GASB Statement No. 34, Basic Financial Statements – and Management’s Discussion and Analysis – for State and Local Governments, requires that management provide a narrative introduction, overview and analysis to accompany the basic financial statements in the form of MD&A. This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. In addition to the financial analysis addressing the Commonwealth’s governmental and business-type activities, the MD&A focuses on the Commonwealth’s major funds: General, Commonwealth Transportation Special Revenue, Federal Trust Special Revenue, Literary Special Revenue, Virginia Lottery, Virginia College Savings Plan, and Unemployment Compensation. The Commonwealth’s MD&A can be found on page 27 immediately following the independent auditor’s report.
PROFILE OF THE GOVERNMENT

Reporting Entity

For financial reporting purposes, the Commonwealth’s reporting entity consists of (1) the primary government, (2) component unit organizations for which the primary government is financially accountable or for which the resources of the component unit primarily benefit the primary government (blended component units), and (3) other component unit organizations for which the nature and significance of their relationship with the primary government is such that exclusion would cause the reporting entity’s financial statements to be misleading or incomplete (discrete component units). The funds and accounts of all agencies, boards, commissions, foundations, and authorities that have been identified as part of the primary government or a component unit have been included. Further information can be found in Note 1.B. to the Financial Statements.

Section 2100 of the GASB Codification of Governmental Accounting and Financial Reporting Standards describes the criteria for determining which organizations, functions, and activities should be considered part of the Commonwealth for financial reporting purposes. The basic criteria include appointing a voting majority of an organization’s governing body, as well as the Commonwealth’s ability to impose its will on that organization, or the potential for the organization to provide specific financial benefits to, or impose specific financial burdens on, the Commonwealth. The Commonwealth’s discretely presented major component units are the Virginia Housing Development Authority, Virginia Public School Authority, Virginia Resources Authority, and Virginia College Building Authority.

The Commonwealth and its component units provide a wide range of services and funding to its citizens, including elementary, secondary and higher education; health and human services; economic development; environmental and natural resources; public safety, corrections, and regulation; transportation; agriculture; and general government services. The financial activities associated with these services are reflected in both summary and detail throughout the CAFR.

Budgetary Control

In addition to the internal controls previously discussed, the Commonwealth maintains budgetary controls to ensure compliance with the legal provisions of the Commonwealth’s Appropriation Act, which reflects the General Assembly’s approval of a biennial budget. The financial transaction process begins with development and approval of the budget, after which budgetary control is maintained through a formal appropriation and allotment system. The budgeted amounts reflected in the accompanying financial statements represent summaries of agency budgets.

The Commonwealth’s budget is prepared principally on a cash basis and represents appropriations as authorized by the General Assembly on a biennial basis at the program level. The Commonwealth monitors spending activity to ensure the expenditures do not exceed the appropriated amounts at the agency level. The State Comptroller maintains a central general ledger that records total appropriations and related expenditures for all agencies and institutions included in the approved budget. Systemic controls are in place to prevent disbursements that exceed authorized appropriations. Additional information regarding the Commonwealth’s budgetary process can be found in Note 1.E. to the Financial Statements.

ECONOMIC REVIEW

Local Economy

Introduction

This overview of the economy of the Commonwealth of Virginia was prepared by the Weldon Cooper Center for Public Service at the University of Virginia. In fiscal year 2019, Virginia’s economy continued to grow at a moderate pace, albeit at a slower rate than the nation on most economic indicators as it has for much of the economic expansion. Even though the employment growth was slower than the fiscal year before, overall unemployment continued to decline throughout the Commonwealth. Personal income and taxable sales growth remained fairly steady. Housing market indicators deteriorated during the fiscal year, with existing home sales and building permit activity dropping and home price growth rates decelerating. Economic growth is expected to slow in the next fiscal year with slower global growth and heightened trade conflict contributing to weakening business and consumer sentiment.
Employment

Virginia non-farm payroll employment grew at 0.9 percent in fiscal year 2019, which was the 10th straight year of expansion (Figure 1). However, this growth rate trailed the national rate of 1.7 percent. Moreover, it was slower than the 1.1 percent rate from the year before and represented the slowest rate of growth in the last five years. The state underperformed the U.S. in every economic sector, with the exceptions of the manufacturing and government (federal, state, and local) sectors.

![Figure 1](image.png)

**Annual Percentage Change in Nonfarm Payroll Employment**
Fiscal Years 2014 – 2019

Source: U. S. Bureau of Labor Statistics

Virginia nonfarm employment crossed the 4.0 million threshold for the first time in fiscal year 2019. The state added an estimated 36,600 jobs during the fiscal year, significantly fewer jobs than the average of 50,000 jobs added per fiscal year from 2015 to 2018. Figure 2 illustrates changes in Virginia’s nonfarm employment by industry for fiscal years 2014 through 2019 along with the employment change between fiscal years 2018 and 2019 for Virginia and the U.S. The largest employment increases occurred in professional and business services (13,700), which has been a consistent job generator outside of federal budget sequestration years. The education and health services sector was the second leading sector, with an addition of 7,700 jobs. The health services sector may have benefited from state expansion of its Medicaid program during the fiscal year. Manufacturing saw its largest employment gain in over five years, with the addition of 7,000 jobs. Other job-gaining sectors were leisure and hospitality (6,000 jobs); federal, state, and local government (4,200 jobs); transportation and utilities (3,600 jobs); construction (2,600 jobs), and financial activities (400 jobs). As in the previous three years, both the retail trade (loss of 6,500 jobs) and information (decrease of 2,600 jobs) sectors failed to grow, likely due to competition from online commerce and digital products, and productivity improvements in those industries.
### Figure 2
Nonfarm Payroll Employment in Virginia’s Industries
Fiscal Years 2014 – 2019

<table>
<thead>
<tr>
<th>Industry*</th>
<th>Virginia Employment (000)</th>
<th>Change, FY 2018 to FY 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining and logging</td>
<td>9.8</td>
<td>9.3</td>
</tr>
<tr>
<td>Construction</td>
<td>177.1</td>
<td>180.8</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>231.5</td>
<td>232.9</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>109.9</td>
<td>109.6</td>
</tr>
<tr>
<td>Retail trade</td>
<td>410.0</td>
<td>412.2</td>
</tr>
<tr>
<td>Transportation and utilities</td>
<td>117.9</td>
<td>123.1</td>
</tr>
<tr>
<td>Information</td>
<td>71.6</td>
<td>70.3</td>
</tr>
<tr>
<td>Financial activities</td>
<td>193.2</td>
<td>195.7</td>
</tr>
<tr>
<td>Professional and business services</td>
<td>679.4</td>
<td>689.3</td>
</tr>
<tr>
<td>Education and health services</td>
<td>494.1</td>
<td>503.6</td>
</tr>
<tr>
<td>Leisure and hospitality</td>
<td>368.6</td>
<td>376.2</td>
</tr>
<tr>
<td>Other services</td>
<td>194.8</td>
<td>195.9</td>
</tr>
<tr>
<td>Federal government</td>
<td>175.3</td>
<td>175.3</td>
</tr>
<tr>
<td>State government</td>
<td>159.8</td>
<td>161.0</td>
</tr>
<tr>
<td>Local government</td>
<td>375.1</td>
<td>374.7</td>
</tr>
<tr>
<td>Total</td>
<td>3,768.1</td>
<td>3,809.9</td>
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Source: U. S. Bureau of Labor Statistics; some prior year numbers were revised to reflect the incorporation of newly available and revised source data.

* North American Industry Classification System (NAICS)

Figure 3 shows the annual percentage change in nonfarm employment for 10 of the 11 Metropolitan Statistical Areas (MSAs) in Virginia. The Kingston-Bristol MSA is not included in this table because most of it is located in Tennessee and data for this indicator are not reported separately for the Virginia portion of the MSA. Northern Virginia (the Virginia portion of the DC metropolitan area), Richmond, and the Shenandoah Valley metropolitan areas (Winchester, Charlottesville, and Staunton-Waynesboro) exhibited stronger growth during the fiscal year than the state at large. Southwestern metropolitan areas (Blacksburg-Christsiansburg-Radford, and Roanoke MSAs) and Hampton Roads significantly trailed the state in job growth, as has been true of much of the economic expansion.
Figure 3
Annual Percentage Change in Nonfarm Payroll Employment in Virginia’s MSAs
Fiscal Years 2014 – 2019

<table>
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<tbody>
<tr>
<td>Virginia</td>
<td>0.4%</td>
<td>1.1%</td>
<td>2.3%</td>
<td>1.0%</td>
<td>1.1%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Metropolitan areas (a)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blacksburg-Christiansburg-Radford</td>
<td>0.8%</td>
<td>0.8%</td>
<td>1.7%</td>
<td>-0.7%</td>
<td>0.6%</td>
<td>0.0%</td>
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<tr>
<td>Charlottesville</td>
<td>1.3%</td>
<td>3.6%</td>
<td>2.5%</td>
<td>2.0%</td>
<td>1.8%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Harrisonburg</td>
<td>0.4%</td>
<td>0.9%</td>
<td>2.5%</td>
<td>1.8%</td>
<td>1.3%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Lynchburg</td>
<td>0.4%</td>
<td>0.6%</td>
<td>0.9%</td>
<td>-0.3%</td>
<td>0.6%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Northern Virginia</td>
<td>-0.1%</td>
<td>0.9%</td>
<td>2.7%</td>
<td>1.7%</td>
<td>1.6%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Richmond</td>
<td>1.6%</td>
<td>1.9%</td>
<td>3.1%</td>
<td>1.1%</td>
<td>1.1%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Roanoke</td>
<td>0.8%</td>
<td>0.3%</td>
<td>0.7%</td>
<td>-0.2%</td>
<td>0.0%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Staunton-Waynesboro</td>
<td>1.1%</td>
<td>1.2%</td>
<td>1.6%</td>
<td>0.5%</td>
<td>0.6%</td>
<td>1.6%</td>
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<tr>
<td>Virginia Beach-Norfolk-Newport News (b)</td>
<td>0.7%</td>
<td>0.4%</td>
<td>1.3%</td>
<td>0.9%</td>
<td>1.4%</td>
<td>0.4%</td>
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<tr>
<td>Winchester (c)</td>
<td>2.2%</td>
<td>1.4%</td>
<td>2.6%</td>
<td>1.9%</td>
<td>1.8%</td>
<td>1.3%</td>
</tr>
</tbody>
</table>

Source: U. S. Bureau of Labor Statistics; some prior year numbers were revised to reflect the incorporation of newly available and revised source data
(a) Excludes Kingsport-Bristol MSA, and TN-VA, most of which is located in Tennessee
(b) Includes portion in North Carolina
(c) Includes portion in West Virginia

Personal Income

Personal income provides the best currently available gauge of the overall health of Virginia’s economy. Changes in personal income are also strongly correlated with state government revenues such as income tax and retail sales tax collections. As shown in Figure 4, state personal income growth in fiscal year 2019 (4.9 percent) was the highest since fiscal year 2015. However, the state continued to lag slightly behind the nation on this economic measure as it has for most of the economic expansion. Wages and salaries, which constitute over half of Virginia total personal income, grew 4.4 percent in fiscal year 2019. The next largest component is dividends, interest and rent, which expanded 5.4 percent. Among other components, transfer receipts increased 6.4 percent, supplements to wages and salaries (which includes employer contributions to employee pensions, health insurance, social security/Medicare and other benefits) grew 4.3 percent, and proprietors’ income advanced 4.6 percent.
Unemployment

Despite slower job growth, labor markets continued to tighten significantly across the state during fiscal year 2019. Figure 5 shows that the unemployment rate in Virginia declined from 3.3 percent in fiscal year 2018 to 2.9 percent in fiscal year 2019. The national rate fell from 4.1 percent to 3.8 percent over the same period. For the first time, the state unemployment rate dipped below the 3.0 percent state unemployment rate in fiscal year 2007, the year immediately preceding the recession.
Figure 6 shows unemployment rates for Virginia’s metropolitan and non-metropolitan regions. Every region saw significant further improvements in fiscal year 2019. Unemployment rates are now lower than 3.5 percent for all of the state’s metropolitan areas and averaged 2.8 percent during the fiscal year, down from 3.2 percent the year before. The nonmetropolitan unemployment rate dropped to 3.6 percent from 4.2 percent in fiscal year 2018. The gap between metropolitan and nonmetropolitan area unemployment rates continued to narrow and indicate that rural area labor markets are more robust than in a generation.

### Figure 6
**Civilian Unemployment Rate for Virginia’s MSAs**
Fiscal Years 2014 – 2019

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Virginia</td>
<td>5.5%</td>
<td>4.9%</td>
<td>4.1%</td>
<td>4.0%</td>
<td>3.3%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Metropolitan Areas</td>
<td>5.2%</td>
<td>4.7%</td>
<td>3.9%</td>
<td>3.9%</td>
<td>3.2%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Blacksburg-Christiansburg-Radford</td>
<td>5.8%</td>
<td>5.1%</td>
<td>4.4%</td>
<td>4.8%</td>
<td>3.5%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Charlottesville</td>
<td>4.8%</td>
<td>4.4%</td>
<td>3.6%</td>
<td>3.6%</td>
<td>3.0%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Harrisonburg</td>
<td>5.5%</td>
<td>5.0%</td>
<td>4.1%</td>
<td>4.0%</td>
<td>3.3%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Kingsport-Bristol</td>
<td>6.3%</td>
<td>5.5%</td>
<td>4.7%</td>
<td>4.6%</td>
<td>3.7%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Lynchburg</td>
<td>5.9%</td>
<td>5.4%</td>
<td>4.5%</td>
<td>4.6%</td>
<td>3.9%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Northern Virginia</td>
<td>4.5%</td>
<td>4.1%</td>
<td>3.4%</td>
<td>3.3%</td>
<td>2.8%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Richmond</td>
<td>5.8%</td>
<td>5.1%</td>
<td>4.3%</td>
<td>4.1%</td>
<td>3.5%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Roanoke</td>
<td>5.5%</td>
<td>4.9%</td>
<td>4.0%</td>
<td>4.0%</td>
<td>3.4%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Staunton-Waynesboro</td>
<td>5.2%</td>
<td>4.7%</td>
<td>3.9%</td>
<td>3.8%</td>
<td>3.2%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Virginia Beach-Norfolk-Newport News</td>
<td>6.0%</td>
<td>5.4%</td>
<td>4.6%</td>
<td>4.5%</td>
<td>3.6%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Winchester</td>
<td>5.1%</td>
<td>4.5%</td>
<td>3.7%</td>
<td>3.6%</td>
<td>3.0%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Non-metropolitan Areas</td>
<td>7.4%</td>
<td>6.4%</td>
<td>5.5%</td>
<td>5.1%</td>
<td>4.2%</td>
<td>3.6%</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of Labor Statistics; some prior year numbers were revised to reflect the incorporation of newly available and revised source data.

Figures 7a and 7b show changes in the spatial pattern of unemployment rates in Virginia during the last two fiscal years using locality-level data. Improvements were nearly universal. Just one locality, Emporia City in Southside, saw a slight unemployment rate increase over the previous fiscal year (0.1 percent). For fiscal year 2019, the only large contiguous region where unemployment rates exceed 4.0 percent was in the Coalfield region (Buchanan, Dickenson, Russell, Tazewell, and Wise counties), which continues to be disproportionately affected by reductions in coal mining employment. Parts of the Southside, Southwest, Northern Neck and Eastern Shore experienced unemployment rates higher than the state average of 3.3 percent but saw significant improvements over the previous fiscal year.
Figure 7a
Unemployment Rate by Locality
Fiscal Year 2019

Source: Virginia Employment Commission

Figure 7b
Unemployment Rate by Locality
Fiscal Year 2018

Source: Virginia Employment Commission
Taxable Sales

Changes in state retail sales are represented here using information on taxable sales. This measure is a useful proxy for retail sales, but omits some goods (e.g., motor vehicles, motor fuel sales) that appear in the comparable national measure and includes some services (e.g., restaurant sales, lodging sales) not included in that measure. Figure 8 shows that the taxable sales growth rate grew at the same rate in fiscal year 2019 as the previous fiscal year (1.9 percent).

![Figure 8](image)

**Figure 8**

Annual Percentage Change in Taxable Sales in Virginia

Fiscal Years 2014 - 2019

Source: Virginia Department of Taxation.

Housing Market

The Virginia housing market showed signs of sluggishness during fiscal year 2019. Sales of existing and home building decreased from the fiscal year before. According to data available from the Virginia Association of Realtors, sales of single-family homes, townhomes, and condos decreased from 123,137 units in fiscal year 2018 to 121,879 units in fiscal year 2019. This represents a 1.0 percent rate of decrease compared to a 1.7 percent rate of increase in fiscal year 2018. Building permit data show a larger decrease of 2.3 percent in fiscal year 2019 for the number of new privately-owned housing units authorized for construction in Virginia (Figure 9). This is the first decrease since fiscal year 2015 (3.4 percent) and was a larger drop than the nation experienced (0.9 percent).
Housing prices published by the Federal Housing Finance Agency indicate that price appreciation has also begun to slow. **Figure 10** shows the percentage change in housing prices for Virginia and the nation. Virginia housing prices increased 4.4 percent in fiscal year 2019, down from 5.3 percent in fiscal year 2018. Virginia housing price growth lagged behind the national rate of growth at 5.7 percent in what is now a familiar pattern. The decreased housing activity reflects a variety of demand and supply factors, including changes in new federal tax policy treatment of income tax deductions for mortgage interest and state and local taxes, increasing mortgage rates caused by more restrictive federal reserve policy up until the summer of 2019, limited inventories of affordable housing stock, and increases in the costs of some home construction inputs.
Comptroller, chair the Cardinal Steering Committee, and both DOA and DHRM have assigned full-time resources to this project. At the present time, we anticipate project completion and implementation by the end of calendar year 2021. I, as State Personnel Management Information System (PMIS) and Benefits Eligibility System (BES), and integrate these statewide systems into Resource Management (DHRM) to replace the existing statewide payroll system (CIPPS), along with the Commonwealth's statewide ledger accounting system for the Commonwealth, and CARS was retired. The next phase of this project involves a partnership between the Department of Accounts (DOA) and the Department of Human Resource Management (DHRM) to replace the existing statewide payroll system (CIPPS), along with the Commonwealth’s statewide Personnel Management Information System (PMIS) and Benefits Eligibility System (BES), and integrate these statewide systems into Cardinal. At the present time, we anticipate project completion and implementation by the end of calendar year 2021. I, as State Comptroller, chair the Cardinal Steering Committee, and both DOA and DHRM have assigned full-time resources to this project.
The Government Finance Officers Association of the United States and Canada (GFOA) awarded the Certificate of Achievement for Excellence in Financial Reporting to the Commonwealth for its CAFR for the fiscal year ended June 30, 2018. The Certificate of Achievement is a prestigious national award that recognizes conformance with the highest standards for preparation of state and local government financial reports. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report that conforms to program standards. Such reports must satisfy both accounting principles generally accepted in the United States of America and all applicable legal requirements.

A Certificate of Achievement is valid for a period of one year. The Commonwealth has received a Certificate of Achievement for the last 33 consecutive years (fiscal years 1986-2018). I believe that this year’s report continues to conform to the Certificate of Achievement program requirements and we are submitting it to GFOA.

This report could not have been prepared without the full cooperation of all state agencies within the Executive Branch, the Legislature, the Judiciary, the Component Units, and especially the dedication and professionalism of the financial reporting staff in the Department of Accounts.

Respectfully submitted,

David A. Von Moll
Comptroller of the Commonwealth of Virginia
Certificate of Achievement for Excellence in Financial Reporting

Presented to

Commonwealth of Virginia

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2018

[Signature]

Executive Director/CEO
Organization of Executive Branch of Government

As of June 30, 2019

**Attorney General**
- Department of Law

**Governor**
- Chief of Staff
- Interstate Organization Contributions

**Lieutenant Governor**
- Secretary of the Commonwealth
- Office of the State Inspector General

### Secretary of Administration
- Compensation Board
- Department of General Services
- Department of Human Resource Management
- Department of Elections
- Virginia Information Technologies Agency

### Secretary of Agriculture and Forestry
- Virginia Agricultural Council
- Department of Agriculture and Consumer Services
- Department of Forestry
- Virginia Racing Commission

### Secretary of Commerce and Trade
- Board of Accountancy
- Department of Housing and Community Development
- Department of Labor and Industry
- Department of Mines, Minerals and Energy
- Department of Professional and Occupational Regulation
- Department of Small Business and Supplier Diversity
- Tobacco Region Revitalization Commission
- Virginia Economic Development Partnership
- Virginia Employment Commission
- Virginia Tourism Authority
- Innovation and Entrepreneurship Investment Authority

### Secretary of Health and Human Resources
- Office of Children’s Services
- Department for Aging and Rehabilitative Services
- Department for the Blind and Vision Impaired
- Department for the Deaf and Hard-of-Hearing
- Department of Behavioral Health and Developmental Services
- Department of Health
- Department of Health Professions
- Department of Medical Assistance Services
- Department of Social Services
- Virginia Board for People with Disabilities
- Virginia Foundation for Healthy Youth
- Virginia Rehabilitation Center for the Blind and Vision Impaired
- Wilson Workforce and Rehabilitation Center

### Secretary of Education
- Christopher Newport University
- Department of Education
- Frontier Culture Museum of Virginia
- George Mason University
- Gunston Hall
- Institute for Advanced Learning and Research
- James Madison University
- Jamestown-Yorktown Foundation
- Longwood University
- New College Institute
- Norfolk State University
- Old Dominion University
- Radford University
- Richard Bland College
- Roanoke Higher Education Authority
- Southern Virginia Higher Education Center
- Southwest Virginia Higher Education Center
- State Council of Higher Education for Virginia
- The College of William and Mary
- The Library of Virginia
- The Science Museum of Virginia
- University of Mary Washington
- University of Virginia
- Virginia College Building Authority
- Virginia Commission for the Arts
- Virginia Commonwealth University
- Virginia Community College System
- Virginia Institute of Marine Science
- Virginia Military Institute
- Virginia Museum of Fine Arts
- Virginia Polytechnic Institute and State University
- Virginia School for the Deaf and the Blind
- Virginia State University

### Secretary of Finance
- Department of Accounts
- Department of Planning and Budget
- Department of Taxation
- Department of the Treasury
- Treasury Board

### Secretary of Natural Resources
- Department of Conservation and Recreation
- Department of Environmental Quality
- Department of Game and Inland Fisheries
- Department of Historic Resources
- Marine Resources Commission
- Virginia Museum of Natural History

### Secretary of Public Safety and Homeland Security
- Commonwealth Attorneys’ Services Council
- Department of Corrections
- Department of Criminal Justice Services
- Department of Emergency Management
- Department of Fire Programs
- Department of Forensic Science
- Department of Juvenile Justice
- Department of Military Affairs
- Department of State Police
- Virginia Alcoholic Beverage Control Authority
- Virginia Correctional Enterprises
- Virginia Parole Board

### Secretary of Transportation
- Department of Aviation
- Department of Motor Vehicles
- Department of Rail and Public Transportation
- Department of Transportation
- Motor Vehicle Dealer Board
- Virginia Port Authority

### Secretary of Veterans and Defense Affairs
- Department of Veterans Services
Organization of the Department of Accounts

As of December 13, 2019

State Comptroller
David A. Von Moll, CPA, CGFM

Deputy State Comptroller
Lewis R. (Randy) McCabe, Jr., CPA, CGFM, CGMA

Director, Payroll Service Bureau
Vacant

Chief Technology Officer
Pamela W. Tauer

Information Security Officer
Frank J. Pitera

Director, Compliance Oversight & Federal Reporting
Amanda R. Simpson, CFE

Director, Finance and Administration
Douglas N. Page, CPA

Director, General Accounting
Melinda L. Pearson, CPA

Director, State Payroll Operations
Cathy C. McGill

Director, Cardinal Enterprise Applications
Stacy D. McCracken

Director, Financial Reporting
Sharon H. Lawrence, CPA, CGMA

Assistant Director, Financial Statements
John J. Sotos, CPA

CAFR Project Lead
Christy Tuck, CPA

Senior Financial Reporting Analyst
Thomas E. Mays, CPA

Financial Reporting Analyst
Diana M. Lyon, CPA

Financial Reporting Analyst
Keya H. Turakhia

Financial Reporting Analyst
Brittany E. Tucker

Aneri K. Patel

Assistant Director, Financial Statements
Susan L. Jones

CAFR Project Lead
Jennifer A. Wykoff

Senior Financial Reporting Analyst
Esther Kim, CPA, CGMA

Senior Financial Reporting Analyst
William H. Campbell, Jr.

Senior Financial Reporting Analyst
Nadine Chambers, CPA

Financial Reporting Analyst
Catrina W. Case

Assistant Director, Financial Statements
Matthew K. Wiggins

CAFR Project Lead
Sarah D. Drysdale

Senior Financial Reporting Analyst
Tiffany D. Hopkins

Financial Reporting Analyst / Learning Center Administrator
Marianne P. Madison

Capital Assets and Lease Accounting Analyst
Andrew B. Binks

Assistant Director, Capital Assets & Lease Reporting
Robert D. Eddleton, CPA, CIA

Assistant Director, Capital Assets and Lease Reporting Analyst

Financial Reporting Analyst
Taylor E. Williams

Financial Reporting Analyst
Vacant
December 13, 2019

The Honorable Ralph S. Northam
Governor of Virginia

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

INDEPENDENT AUDITOR’S REPORT

Report on Financial Statements

We have audited the accompanying financial statements of the governmental activities, the business-type activities, the aggregate discretely presented component units, each major fund, and the aggregate remaining fund information of the Commonwealth of Virginia, as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the Commonwealth’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 opinions on these financial statements based on our audit. We did not audit the financial statements of Virginia College Savings Plan (major fund and private purpose trust fund), which is discussed on pages 53 and 262, and certain blended and discretely presented component units of the Commonwealth, which are discussed in Note 1.B. The Virginia College Savings Plan and component units account for the following percentages of total assets and deferred outflows of resources; revenues, additions, and other financing sources; and net position/fund balance of the opinion units affected.

<table>
<thead>
<tr>
<th>Opinion Unit</th>
<th>Total Assets and Deferred Outflows</th>
<th>Net Position/Fund Balance</th>
<th>Revenues, Additions, and Other Financing Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governmental Activities</td>
<td>2.24%</td>
<td>4.33%</td>
<td>1.90%</td>
</tr>
<tr>
<td>Business-type Activities</td>
<td>58.77%</td>
<td>41.64%</td>
<td>6.67%</td>
</tr>
<tr>
<td>Virginia College Savings Plan Major Enterprise Fund</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Aggregate Remaining Fund Information</td>
<td>5.80%</td>
<td>6.47%</td>
<td>4.12%</td>
</tr>
<tr>
<td>Aggregate Discretely Presented Component Units</td>
<td>28.28%</td>
<td>24.11%</td>
<td>9.82%</td>
</tr>
</tbody>
</table>

Those financial statements were audited by other auditors whose reports thereon have been furnished to us, and our opinions, insofar as it relates to the amounts included for the Virginia College Savings Plan and certain blended and discretely presented component units are based on the reports of the other auditors.
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. The financial statements of the Science Museum of Virginia Foundation, Virginia Museum of Fine Arts Foundation, Library of Virginia Foundation, and Danville Science Center, Inc., which were audited by other auditors upon whose reports we are relying, were audited in accordance with auditing standards generally accepted in the United States of America, but not in accordance with Government Auditing Standards.

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 opinions.

Opinion

In our opinion, based on our audit and the reports of other auditors, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities, the business-type activities, the aggregate discretely presented component units, each major fund, and the aggregate remaining fund information of the Commonwealth of Virginia as of June 30, 2019, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matters

Correction of 2018 Financial Statements

As discussed in Note 2 of the accompanying financial statements, the fiscal year 2018 governmental activities and nonmajor governmental fund statements have been restated to correct misstatements. Our opinion is not modified with respect to these matters.

Change in Reporting Entity

As discussed in Note 2, the government-wide and nonmajor component unit statements have been restated due to a change in reporting entity. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management’s discussion and analysis, budgetary comparison schedules, the schedule of changes in employer’s net pension liability, schedule of employer contributions for pension plans, schedule of changes in employers’ net other postemployment benefit liability (asset), schedule of the Commonwealth’s proportionate share of the net other postemployment benefit liability, schedule of employer contributions for other postemployment benefit plans, schedule of changes in employers’ total other postemployment benefit liability, and claims development information on pages 27 through 37 and 195 through 222, 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.
Supplementary and Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Commonwealth of Virginia’s basic financial statements. The accompanying supplementary information, such as the combining and individual fund statements and schedules, and other information such as the introductory and statistical sections, are presented for the purpose of additional analysis and is not a required part of the basic financial statements.

The combining and individual non-major fund statements and schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America by us and other auditors. In our opinion, based on our audit, the procedures performed as described above, and the report of the other auditors, the combining and individual non-major fund financial statements and schedules are fairly stated, in all material respects, in relation to the basic financial statements taken as a whole.

The introductory and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, our report dated December 13, 2019, on our consideration of the Commonwealth’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 is issued in the Commonwealth of Virginia Single Audit Report. 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 Commonwealth’s internal control over financial reporting and compliance.

Martha S. Mavredes
MARTHA S. MAVREDES
AUDITOR OF PUBLIC ACCOUNTS
The following is a discussion and analysis of the Commonwealth of Virginia’s (the Commonwealth) financial performance, including an overview and analysis of the financial activities of the Commonwealth for the fiscal year ended June 30, 2019. Readers should consider this information in conjunction with the transmittal letter, which is located in the Introductory Section of this report, and the Commonwealth’s financial statements, including the notes to the financial statements, which are located after this analysis.

**Financial Highlights**

**Government-wide Highlights**

The primary government’s assets and deferred outflows of resources exceeded its liabilities and deferred inflows of resources at June 30, 2019, by $27.2 billion. Net position of governmental activities increased by $2.5 billion and net position of business-type activities increased by $405.5 million. Component units reported an increase in net position of $1.8 billion from June 30, 2018.

**Fund Highlights**

At the end of the fiscal year, the Commonwealth’s governmental funds reported a combined ending fund balance of $6.9 billion, an increase of $1.5 billion in comparison with the prior year. Of this total fund balance, $298.8 million represents nonspendable fund balance, $2.8 billion represents restricted fund balance, $4.0 billion represents committed fund balance, and $34.0 million represents assigned fund balance. These amounts are offset by a negative $326.8 million unassigned fund balance. The Enterprise Funds reported net position at June 30, 2019, of $2.5 billion, an increase of $403.3 million during the year which is primarily attributable to the Virginia College Savings Plan and the Unemployment Compensation Funds. See page 33 for additional information.

The General Fund recognized higher fund assets and deferred outflows of resources, as well as revenues, expenditures, liabilities and deferred inflows of resources when compared to fiscal year 2018. See page 34 for additional information.

**Long-term Debt**

The Commonwealth’s total debt declined during the fiscal year to $46.5 billion, a decrease of $590.8 million, or 1.3 percent. While the Commonwealth issued new debt in the amount of $801.6 million and $2.2 billion for the primary government and component units, respectively, the fiscal year 2019 debt issuances were lower than the prior year. The new debt issuances coupled with debt retirements decreased the total debt balances for the primary government and component units to $16.0 billion and $30.5 billion, respectively.

**Overview of the Financial Statements**

This discussion and analysis is an introduction to the Commonwealth’s basic financial statements, which include three components: 1) government-wide financial statements; 2) fund financial statements; and 3) notes to the financial statements. The report also contains additional required supplementary information and other information.

**Government-wide Statements**

The government-wide financial statements are designed to provide readers with a broad overview of the Commonwealth’s finances in a manner similar to a private-sector business. The statements provide both short-term and long-term information about the Commonwealth’s financial position which helps readers determine whether the Commonwealth’s financial position has improved or deteriorated during the fiscal year. These statements include all non-fiduciary financial activity on the full accrual basis of accounting. This means that all revenue and expenditures are reflected in the financial statements even if the related cash has not been received or paid as of June 30.

The Statement of Net Position (pages 40 and 41) presents information on all of the Commonwealth’s assets and deferred outflows of resources, and liabilities and deferred inflows of resources; net position represents the difference between all other elements in a statement of financial position and is displayed in three components – net investment in capital assets; restricted; and unrestricted. Over time, increases or decreases in net position may indicate whether the financial position of the Commonwealth is improving or deteriorating.

The Statement of Activities (pages 42 through 44) presents information showing how the Commonwealth’s net position changed during fiscal year 2019. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. Thus, revenues and expenses are reported in this statement for some items that will only result in cash flows in future fiscal periods (e.g., uncollected taxes and earned but unused vacation leave).
Both the Statement of Net Position and Statement of Activities report three separate activities. These activities are described as follows:

**Governmental Activities** – account for functions of the Commonwealth that are primarily supported by taxes and intergovernmental revenues. The majority of the Commonwealth’s basic services, such as education, individual and family services, transportation, resources and economic development, administration of justice, and general government, fall within this category.

**Business-type Activities** – account for functions that are intended to recover all or a significant portion of their costs through user fees and charges. The major business-type activities of the Commonwealth include the Virginia Lottery, Virginia College Savings Plan, and Unemployment Compensation Fund.

**Discretely Presented Component Units** – account for functions of legally separate entities for which the Commonwealth is financially accountable. The Commonwealth has 24 non-higher education component units and 22 higher education institutions that are reported as discretely presented component units. Information regarding the individual financial statements of the component units is presented in the notes to the financial statements.

This report includes two schedules (pages 48 and 52) that reconcile the amounts reported on the governmental fund financial statements (modified accrual accounting) with governmental activities on the appropriate government-wide statements (full accrual accounting). The following indicates some of the reporting differences between the government-wide financial statements and the fund financial statements.

- Capital assets used in governmental activities are not reported on governmental fund statements
- Long-term liabilities, unless due and payable, are not included in the fund financial statements. These liabilities are only included in the government-wide statements.
- Internal service funds are reported as governmental activities in the government-wide statements, but are reported as proprietary funds in the fund financial statements.
- Other long-term assets that are not available to pay for current period expenditures are deferred in the governmental fund statements, but not deferred in the government-wide statements.
- Capital outlay spending results in capital assets on the government-wide statements, but is reported as expenditures in the fund financial statements.
- Bond proceeds provide current financial resources on the fund financial statements, but are recorded as long-term liabilities in the government-wide financial statements.

**Fund Financial Statements**

A fund is a grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. The Commonwealth, like other state and local governments, uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements. All of the Commonwealth’s funds can be divided into three categories: governmental, proprietary, and fiduciary. Each of these categories uses different accounting approaches. Fund financial statements begin on page 46 and provide detailed information about the major individual funds.

- **Governmental funds** – Most of the basic services provided by the Commonwealth are reported in the governmental funds. These statements provide a detailed, short-term view of the functions reported as governmental activities in the government-wide financial statements. The government-wide financial statements are reported using the full accrual basis of accounting, but the governmental fund financial statements are reported using the modified accrual basis of accounting. This allows the reader to focus on assets that can be readily converted to cash and determine whether there are adequate resources to meet the Commonwealth’s current needs.

Because the focus of governmental funds is more limited than that of the government-wide financial statements, it is useful to compare the information presented for governmental funds with similar information presented for governmental activities in the government-wide financial statements. This comparison can help readers better understand the long-term impact of the Commonwealth’s near-term financing decisions. Both the governmental fund balance sheet and the governmental fund statement of revenues, expenditures, and changes in fund balances provide a reconciliation to facilitate this comparison between governmental funds and governmental activities. These reconciliations are presented on the page immediately following each governmental fund financial statement.

The Commonwealth reports 15 individual governmental funds. Information is presented separately in the governmental fund statements for the General, Commonwealth Transportation, Federal Trust, and Literary funds, which are all considered major funds. Data from the other 11 governmental funds are aggregated into a single column on the fund statements. Individual fund data for these nonmajor governmental funds is provided in the combining financial statements immediately following the required supplementary information.
**Proprietary funds** – The Commonwealth maintains two different types of proprietary funds: enterprise and internal service. These funds report activities that operate more like those of private-sector business and use the full accrual basis of accounting.

Enterprise funds report activities that charge fees for supplies or services to the general public like the Virginia Lottery. Enterprise funds are reported as business-type activities on the government-wide financial statements. The enterprise funds use the full accrual basis of accounting and the only differences between amounts reported on the government-wide statements and the enterprise fund statements are due to internal service fund activity (see reconciliations on pages 54 and 56).

Internal service funds report activities that charge fees for supplies and services to other Commonwealth agencies, like Fleet Management. Internal service funds are reported as governmental activities in the government-wide statements because these types of services predominantly benefit governments rather than business-type functions.

The Commonwealth reports 26 individual proprietary funds. Information is presented separately in the proprietary fund statements for the Virginia Lottery, Virginia College Savings Plan, and Unemployment Compensation Funds, all of which are considered major funds. Data from the other enterprise funds is aggregated into a single column on the fund statements. All internal service funds are aggregated into a single column on the fund statements. Individual fund data for all nonmajor proprietary funds is provided in the combining financial statements immediately following the required supplementary information.

**Fiduciary funds** – These funds are used to account for resources held for the benefit of parties outside the government and use the full accrual basis of accounting. Fiduciary funds are excluded from the government-wide financial statements because the resources of these funds are restricted and cannot be used to finance the Commonwealth’s operations. The Commonwealth’s fiduciary activities are reported in separate Statements of Fiduciary Net Position and Changes in Fiduciary Net Position beginning on page 64.

The Commonwealth’s fiduciary funds are the:

- Private Purpose Trusts, which reports the activities for six separate funds and accounts for transactions of trust arrangements in which the principal and income benefit individuals, private organizations, or other governments;
- Pension and Other Employee Benefit Trusts, which reports the activities of 13 separate pension and other employment retirement plans for employees;
- Investment Trust, which accounts for the activities of the two external investment pools; and,
- Agency, which accounts for assets held on behalf of others in 18 separate funds.

Individual fund data for all fiduciary funds is provided in the combining financial statements immediately following the required supplementary information.

**Component Units** – The government-wide financial statements report information for all component units aggregated in a single column. Information is provided separately in the component unit fund statements for the Virginia Housing Development Authority, Virginia Public School Authority, Virginia Resources Authority, and Virginia College Building Authority, all of which are considered major component units. Data from the other component units is aggregated into a single column on the fund statements. Individual fund data for all nonmajor component units is provided in the combining financial statements immediately following the required supplementary information.

**Notes to the Financial Statements**

The notes provide additional information that is essential to a full understanding of the data provided in the government-wide and fund financial statements. The notes to the financial statements can be found immediately following the component unit fund financial statements.

**Required Supplementary Information**

The basic financial statements are followed by a section of required supplementary information. This section includes budgetary comparison schedules reconciling the statutory and generally accepted accounting principles fund balances at June 30. It also includes information concerning net pension liability, other postemployment benefit liability plans, and employer contributions for pension and other postemployment benefit plans, as well as trend information for Commonwealth-managed risk pools.
Other Information

The combining statements referred to earlier in connection with nonmajor funds and component units can be found beginning on page 223 of this report. The individual fund information is aggregated into a single total on the combining financial statements, which carries forward to the fund financial statements.

Government-wide Financial Analysis

The primary government’s assets and deferred outflows of resources exceeded its liabilities and deferred inflows of resources by $27.2 billion during the fiscal year. The net position of the governmental activities increased $2.5 billion, or 11.1 percent, primarily due to increases in assets offset by increases in total liabilities and deferred inflows of resources. Capital assets are discussed further on page 35, the long-term liabilities are discussed further on page 36, and deferred inflows and outflows of resources are discussed in Note 15. Business-type activities had an increase of $405.5 million, or 19.6 percent, primarily due to increases for the Virginia College Savings Plan and the Unemployment Compensation Funds on page 33. As discussed in Note 2, the government-wide beginning balance was restated for the correction of prior year errors to arrive at a restated beginning balance of $24.3 billion.

Figure 11
Net Position as of June 30, 2019 and 2018
(Dollars in Thousands)

<table>
<thead>
<tr>
<th></th>
<th>Governmental Activities</th>
<th>Business-type Activities</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018 as restated</td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>Current and other assets</td>
<td>$16,163,570</td>
<td>$13,163,311</td>
<td>$5,127,572</td>
</tr>
<tr>
<td>Capital assets</td>
<td>33,804,048</td>
<td>33,319,215</td>
<td>40,516</td>
</tr>
<tr>
<td>Total Assets</td>
<td>49,967,618</td>
<td>46,482,526</td>
<td>5,168,088</td>
</tr>
<tr>
<td>Deferred outflows of resources</td>
<td>768,171</td>
<td>770,090</td>
<td>22,844</td>
</tr>
<tr>
<td>Total assets and deferred outflows of resources</td>
<td>50,735,789</td>
<td>47,252,616</td>
<td>5,190,932</td>
</tr>
<tr>
<td>Long-term liabilities outstanding</td>
<td>13,673,724</td>
<td>13,860,886</td>
<td>2,286,386</td>
</tr>
<tr>
<td>Other liabilities</td>
<td>7,826,129</td>
<td>6,771,756</td>
<td>405,509</td>
</tr>
<tr>
<td>Total Liabilities</td>
<td>21,499,853</td>
<td>20,632,642</td>
<td>2,691,895</td>
</tr>
<tr>
<td>Deferred inflows of resources</td>
<td>4,493,029</td>
<td>4,349,086</td>
<td>27,060</td>
</tr>
<tr>
<td>Total liabilities and deferred inflows of resources</td>
<td>25,992,882</td>
<td>24,981,728</td>
<td>2,718,955</td>
</tr>
</tbody>
</table>

Net position:

<table>
<thead>
<tr>
<th></th>
<th>2018 as restated</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net investment in capital assets</td>
<td>26,031,917</td>
<td>25,524,252</td>
<td>39,998</td>
</tr>
<tr>
<td>Restricted</td>
<td>2,194,477</td>
<td>1,935,406</td>
<td>1,485,125</td>
</tr>
<tr>
<td>Unrestricted</td>
<td>(3,483,487)</td>
<td>(5,188,770)</td>
<td>946,854</td>
</tr>
<tr>
<td>Total net position</td>
<td>$24,742,907</td>
<td>$22,270,888</td>
<td>$2,471,977</td>
</tr>
</tbody>
</table>

The largest portion of the primary government’s net position reflects its investment in capital assets (e.g., land, buildings, equipment, infrastructure, construction-in-progress, and intangible assets including water rights, easements and software), less any related outstanding debt and deferred inflows of resources used to acquire those assets. These assets are recorded net of depreciation in the financial statements. The primary government uses these capital assets to provide services to citizens; therefore, these assets are not available for future spending. Although the primary government’s investment in its capital assets is reported net of related debt, it should be noted that the resources needed to repay this debt must be provided from other sources, since the capital assets themselves cannot be used to liquidate these liabilities (Figure 11). The governmental activities net investment in capital assets amount exceeds total net position due to a negative unrestricted net position amount unrelated to capital assets.

An additional portion of the primary government’s net position represents restricted net position. These resources are subject to external restrictions or constitutional provisions specifying how they may be used. The remaining balance of negative $2.5 billion is unrestricted net position (Figure 11).

Approximately 55.6 percent of the primary government’s total revenue came from taxes. While the primary government’s expenses cover many services, the largest expenses are for education and individual and family services. General revenues normally fund governmental activities. For fiscal year 2019, program and general revenues exceeded governmental expenses by $1.6 billion. Program revenues exceeded expenses from business-type activities by $1.3 billion. The following condensed financial information (Figure 12) was derived from the Government-wide Statement of Activities and provides detail regarding the change in net position (see page 42).
## Figure 12
Changes in Net Position for the Fiscal Years Ended June 30, 2019 and 2018
(Dollars in Thousands)

<table>
<thead>
<tr>
<th></th>
<th>Governmental Activities</th>
<th>Business-type Activities</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019 as restated</td>
<td>2019</td>
<td>2018 as restated</td>
</tr>
<tr>
<td><strong>Revenues:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Revenues:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charges for Services</td>
<td>$2,796,618</td>
<td>$2,747,441</td>
<td>$4,594,056</td>
</tr>
<tr>
<td>Operating Grants and Contributions</td>
<td>10,927,233</td>
<td>9,871,386</td>
<td>32</td>
</tr>
<tr>
<td>Capital Grants and Contributions</td>
<td>1,528,453</td>
<td>1,969,604</td>
<td>—</td>
</tr>
<tr>
<td><strong>General Revenues:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taxes:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual and Fiduciary Income</td>
<td>14,872,136</td>
<td>14,117,735</td>
<td>—</td>
</tr>
<tr>
<td>Sales and Use</td>
<td>5,457,799</td>
<td>5,266,818</td>
<td>—</td>
</tr>
<tr>
<td>Corporation Income</td>
<td>923,683</td>
<td>851,603</td>
<td>—</td>
</tr>
<tr>
<td>Motor Fuel</td>
<td>1,083,719</td>
<td>1,031,034</td>
<td>—</td>
</tr>
<tr>
<td>Motor Vehicle Sales and Use</td>
<td>971,987</td>
<td>935,101</td>
<td>—</td>
</tr>
<tr>
<td>Communications Sales and Use</td>
<td>359,011</td>
<td>383,221</td>
<td>—</td>
</tr>
<tr>
<td>Deeds, Contracts, Wills, and Suits</td>
<td>442,970</td>
<td>505,255</td>
<td>—</td>
</tr>
<tr>
<td>Premiums of Insurance Companies</td>
<td>554,299</td>
<td>516,743</td>
<td>—</td>
</tr>
<tr>
<td>Alcoholic Beverage Sales</td>
<td>174,144</td>
<td>160,910</td>
<td>—</td>
</tr>
<tr>
<td>Tobacco Products</td>
<td>151,287</td>
<td>161,273</td>
<td>—</td>
</tr>
<tr>
<td>Estate</td>
<td>216</td>
<td>454</td>
<td>—</td>
</tr>
<tr>
<td>Public Service Corporations</td>
<td>111,996</td>
<td>112,131</td>
<td>—</td>
</tr>
<tr>
<td>Beer and Beverage Excise</td>
<td>41,249</td>
<td>41,394</td>
<td>—</td>
</tr>
<tr>
<td>Wine and Spirits/ABC Liter</td>
<td>29,484</td>
<td>28,946</td>
<td>—</td>
</tr>
<tr>
<td>Bank Stock</td>
<td>29,780</td>
<td>23,870</td>
<td>—</td>
</tr>
<tr>
<td>Other Taxes</td>
<td>518,694</td>
<td>133,674</td>
<td>9,141</td>
</tr>
<tr>
<td>Unrestricted Grants and Contributions</td>
<td>60,108</td>
<td>60,695</td>
<td>—</td>
</tr>
<tr>
<td>Investment Earnings</td>
<td>238,588</td>
<td>72,286</td>
<td>1,841</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>368,744</td>
<td>524,761</td>
<td>414</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td>41,642,198</td>
<td>39,516,335</td>
<td>4,606,924</td>
</tr>
<tr>
<td><strong>Expenses:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Government</td>
<td>3,217,820</td>
<td>3,170,832</td>
<td>—</td>
</tr>
<tr>
<td>Education</td>
<td>11,103,677</td>
<td>10,730,908</td>
<td>—</td>
</tr>
<tr>
<td>Transportation</td>
<td>4,927,117</td>
<td>5,325,640</td>
<td>—</td>
</tr>
<tr>
<td>Resources and Economic Development</td>
<td>1,027,271</td>
<td>972,535</td>
<td>—</td>
</tr>
<tr>
<td>Administration of Justice</td>
<td>2,946,304</td>
<td>2,995,238</td>
<td>—</td>
</tr>
<tr>
<td>Interest and Charges on Long-term Debt</td>
<td>256,962</td>
<td>167,111</td>
<td>—</td>
</tr>
<tr>
<td>Virginia Lottery</td>
<td>—</td>
<td>—</td>
<td>1,642,754</td>
</tr>
<tr>
<td>Virginia College Savings Plan</td>
<td>—</td>
<td>—</td>
<td>61,321</td>
</tr>
<tr>
<td>Unemployment Compensation</td>
<td>—</td>
<td>—</td>
<td>273,566</td>
</tr>
<tr>
<td>Alcoholic Beverage Control</td>
<td>—</td>
<td>—</td>
<td>699,242</td>
</tr>
<tr>
<td>Risk Management</td>
<td>—</td>
<td>—</td>
<td>14,894</td>
</tr>
<tr>
<td>Local Choice Health Care</td>
<td>—</td>
<td>—</td>
<td>473,076</td>
</tr>
<tr>
<td>Line of Duty</td>
<td>—</td>
<td>—</td>
<td>17,836</td>
</tr>
<tr>
<td>Virginia Industries for the Blind</td>
<td>—</td>
<td>—</td>
<td>50,158</td>
</tr>
<tr>
<td>Consolidated Laboratory</td>
<td>—</td>
<td>—</td>
<td>10,552</td>
</tr>
<tr>
<td>eVA Procurement System</td>
<td>—</td>
<td>—</td>
<td>20,797</td>
</tr>
<tr>
<td>Department of Environmental Quality Title V</td>
<td>—</td>
<td>—</td>
<td>10,179</td>
</tr>
<tr>
<td>Wireless E-911</td>
<td>—</td>
<td>—</td>
<td>44,134</td>
</tr>
<tr>
<td>Museum and Library Gift Shops</td>
<td>—</td>
<td>—</td>
<td>7,221</td>
</tr>
<tr>
<td>Behavioral Health Canteen and Work Activity</td>
<td>—</td>
<td>—</td>
<td>299</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>40,046,575</td>
<td>38,966,466</td>
<td>3,326,029</td>
</tr>
<tr>
<td><strong>Excess before transfers</strong></td>
<td>1,596,623</td>
<td>1,376,517</td>
<td>405,499</td>
</tr>
<tr>
<td><strong>Transfers</strong></td>
<td>875,396</td>
<td>826,648</td>
<td>(875,396)</td>
</tr>
<tr>
<td><strong>Increase in net position</strong></td>
<td>2,472,019</td>
<td>1,376,517</td>
<td>405,499</td>
</tr>
<tr>
<td><strong>Net position, July 1, as restated</strong></td>
<td>22,270,888</td>
<td>20,894,371</td>
<td>2,066,478</td>
</tr>
<tr>
<td><strong>Net position, June 30</strong></td>
<td>$24,742,907</td>
<td>$22,270,888</td>
<td>$2,471,977</td>
</tr>
</tbody>
</table>
Governmental Activities Revenues

Figure 13 is a graphical representation of the Statement of Activities revenues for governmental activities. Governmental activities revenues increased by $2.1 billion, or 5.4 percent. The net increase is mainly attributable to increases in the General Fund, which are discussed on page 34.

Figure 13
Revenues by Source – Governmental Activities
Fiscal Year 2019

Governmental Activities Expenses

Figure 14 is a graphical representation of the Statement of Activities expenses for governmental activities. Governmental activities expenses increased by $1.1 billion, or 2.8 percent. This change is primarily attributable to increases in all expense types with the exception of transportation and administration of justice. See pages 34 and 35 for additional information.

Figure 14
Expenses by Type – Governmental Activities
Fiscal Year 2019
Net Position of Business-type Activities

Net position of business-type activities increased by $405.5 million during the fiscal year. As shown in Figure 15, highlights of the changes in net position for the major enterprise funds were as follows:

- Lottery sales were $2.3 billion, an increase of $153.7 million over the prior year. Net income was $653.5 million, an increase of $33.2 million (5.4 percent) from fiscal year 2018. Sales of scratch games increased by $37.3 million (3.1 percent) and online sales increased by $116.5 million (12.2 percent). Additionally, there is an increase of $121.8 million (8.0 percent) in total expenses, primarily attributable to the cost of prizes.

- Virginia College Savings Plan’s net position increased by $244.8 million (31.2 percent) during the fiscal year as a result of total revenues exceeding expenses incurred.

- Unemployment Compensation Fund net position increased by $135.9 million during fiscal year 2019, as a result of a decrease in benefit claims and operating revenue exceeding operating expenses.

Over the one-year period from July 1, 2018, to June 30, 2019, the unemployment rate declined from 3.3 percent to 2.9 percent. Additionally, there were approximately 14,212 fewer initial unemployment claims filed than in the previous year. These declines were accompanied by a decrease in the average benefit duration from 15.6 weeks to 14.4 weeks in fiscal year 2019. These decreases were offset by an increase in the average weekly benefit amounts from approximately $299.8 million to $304.7 million in fiscal year 2019. These multiple influences led to a decrease in the total benefit payments of $49.6 million over the prior year.

Figure 15
Business-type Activities
Program Revenues and Expenses
Fiscal Year 2019
(Dollars in Thousands)
The Governor will release his amendments to the 2019-2020 biennial budget on December 17, 2019.

Year 2019 revenue collections. This planned increase is a result of continued growth in individual income taxes and retail sales taxes.

Based on the most recent General Fund revenue estimate, the fiscal year 2020 revenue is projected to increase 1.2 percent over the fiscal year 2019 revenue collections. This planned increase is a result of continued growth in individual income taxes and retail sales taxes. The Governor will release his amendments to the 2019-2020 biennial budget on December 17, 2019.
Major Special Revenue Fund Highlights

The Commonwealth Transportation Fund ended the fiscal year with a fund balance of $2.9 billion. Approximately $6.5 billion is contractually committed for various highways, public transportation, and rail preservation projects; $978.0 million for individual contracts awarded with a contract value of $1.0 million or more for operational and tolling services, facilities, and other non-highway construction-type contracts (see Note 22). Additionally, revenues decreased $54.7 million, or 0.9 percent, and expenditures decreased $568.4 million, or 9.3 percent. The revenue decrease was primarily due to decreases in other revenue of $432.4 million, or 74.0 percent, offset by increases in tax collections of $122.1 million, or 3.3 percent, and in federal income of $122.9 million, or 12.8 percent. Expenditures decreased mainly for highway maintenance, acquisition, and construction.

The Federal Trust Fund balance increased by $20.1 million, or 18.7 percent, primarily due to an increase in Federal Grants and Contracts revenue of approximately $1.3 billion, or 14.0 percent, and a decrease in other revenue of $229.0 million, or 98.0 percent, offset by a significant increase in expenditures of $1.0 billion. This change in the Federal Grants and Contracts revenue was mainly attributed to an increase in Medicaid funding ($1.0 billion). The remaining difference is distributed over many other federal programs. The Other revenue decrease is associated with timing of Medicaid Rebate collections. Expenditures increased primarily due to Medicaid spending. Net other financing sources and uses experienced an increase of $6.8 million, or 44.9 percent, primarily attributable to lower transfers out to other funds.

The Literary Fund ending balance increased by $16.8 million, or 1,623.1 percent. Additionally, while expenditures exceeded net receipts by $115.2 million in fiscal year 2019, this is a significant improvement over the fiscal year 2018 operating results. The loans of $189.9 million owed to the Virginia Public School Authority (major component unit) decreased by $6.4 million, or 3.2 percent, and the transfers from other funds decreased by $47.2 million, or 26.3 percent.

Capital Asset and Long-term Debt

Capital Assets. The primary government’s investment in capital assets for its governmental and business-type activities as of June 30, 2019, amounts to $33.8 billion (net of accumulated depreciation totaling $14.9 billion). This investment in capital assets includes land, buildings, improvements, equipment, infrastructure, construction-in-progress, and intangible assets including water rights, easements, and software. Infrastructure assets are items that are normally immovable such as roads, bridges, drainage systems, and other similar assets. As noted on page 30, increases in capital assets offset by increases in total liabilities and deferred inflows of resources resulted in an increase in net position of the governmental activities of $2.5 billion, or 11.1 percent. The increase in the primary government’s net investment in capital assets was primarily attributable to increases in infrastructure of $530.3 million. These changes are primarily attributable to transportation. The primary government reports equipment with a value of $50,000 or greater and an expected useful life of two or more years. The primary government capitalizes all land, buildings, infrastructure, and intangible assets that have a cost or value greater than $100,000 and an expected useful life of two or more years. Additional information on the primary government’s capital assets can be found in Note 14, Capital Assets.

<table>
<thead>
<tr>
<th>Figure 16</th>
<th>Capital Assets as of June 30, 2019</th>
<th>(Net of Depreciation)</th>
<th>(Dollars in Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Governmental Activities</td>
<td>Business-type Activities</td>
<td>Total</td>
</tr>
<tr>
<td>Land</td>
<td>$3,455,082</td>
<td>$1,874</td>
<td>$3,456,956</td>
</tr>
<tr>
<td>Buildings</td>
<td>2,734,880</td>
<td>9,923</td>
<td>2,744,803</td>
</tr>
<tr>
<td>Equipment</td>
<td>513,794</td>
<td>15,052</td>
<td>528,846</td>
</tr>
<tr>
<td>Water Rights/Easements</td>
<td>105,526</td>
<td>—</td>
<td>105,526</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>22,734,396</td>
<td>—</td>
<td>22,734,396</td>
</tr>
<tr>
<td>Software</td>
<td>490,031</td>
<td>4,654</td>
<td>494,685</td>
</tr>
<tr>
<td>Construction-in-Progress</td>
<td>3,770,339</td>
<td>9,013</td>
<td>3,779,352</td>
</tr>
<tr>
<td>Total</td>
<td>$33,804,048</td>
<td>$40,516</td>
<td>$33,844,564</td>
</tr>
</tbody>
</table>
Long-term Debt. The Commonwealth is prohibited from issuing general obligation bonds for operating purposes. At the end of the current fiscal year, the Commonwealth had total debt outstanding of $46.5 billion, including total tax-supported debt of $21.7 billion and total debt not supported by taxes of $24.8 billion. Bonds backed by the full faith and credit of the government and tax-supported total $1.3 billion. Debt is considered tax-supported if Commonwealth tax revenues are used or pledged for debt service payments. An additional $926.5 million is considered moral obligation debt which is not tax-supported. The Commonwealth has no direct or indirect pledge of tax revenues to fund reserve deficiencies. However, in some cases, the Commonwealth has made a moral obligation pledge to consider funding deficiencies in debt service reserves that may occur. The remainder of the Commonwealth's debt represents bonds secured solely by specified revenue sources (i.e., revenue bonds).

During fiscal year 2019, the Commonwealth issued $3.0 billion of new debt for various projects. Of this new debt, $801.6 million was for the primary government and $2.2 billion for the component units. Additional information on the Commonwealth's outstanding debt can be found in Note 28, Long-Term Liabilities, as well as in the Debt Schedules beginning on page 300. The Commonwealth maintains a "triple A" bond rating for general obligation debt from the three rating agencies: Moody's Investors Service, S & P Global Ratings, and Fitch Ratings.

State statutes limit the amount of general obligation debt the Commonwealth may issue for each specific type of debt. The 9(a) bonds, which may be issued to fund the defense of the Commonwealth, to meet casual deficits in revenue or in anticipation of the collection of revenues, or to redeem previous debt obligations, are limited to 30.0 percent of 1.15 times the annual tax revenues for fiscal year 2019. The 9(b) bonds, which have been authorized by the citizens of Virginia through bond referenda to finance capital projects, are limited to 1.15 times the average of selected tax revenues for fiscal years 2017, 2018, and 2019. The 9(c) bonds, which have been issued to finance capital projects that will generate revenue upon their completion, are limited to 1.15 times the average of selected tax revenues for fiscal years 2017, 2018, and 2019. The current debt limitation for the Commonwealth is shown below for the 9(a), 9(b), and 9(c) general obligation bond issues. These limits significantly exceed the Commonwealth's outstanding general obligation debt.

### Figure 17
**Debt Issuance Margin and Outstanding Debt as of June 30, 2019**

**General Obligation Bonds**

<table>
<thead>
<tr>
<th>Debt Issue Margin</th>
<th>Outstanding Debt</th>
<th>Component Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primary Government</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Governmental Activities</td>
<td>Business-type Activities</td>
</tr>
<tr>
<td></td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>General obligation bonds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9(a)</td>
<td>6,802,826</td>
<td>—</td>
</tr>
<tr>
<td>9(b)</td>
<td>21,108,294</td>
<td>401,873</td>
</tr>
<tr>
<td>9(c)</td>
<td>20,602,433</td>
<td>14,628</td>
</tr>
<tr>
<td>Total</td>
<td>$ 416,501</td>
<td>$</td>
</tr>
</tbody>
</table>
Economic Factors and Review

During fiscal year 2019, the Commonwealth’s economy continued to improve at a similar pace as the prior year. The Commonwealth experienced a lower job growth rate than at the national level (0.9 percent at the state level versus 1.7 percent nationally). Personal income growth reached 4.9 percent during fiscal year 2019, compared to 4.1 percent in fiscal year 2018. However, it lagged behind the national level (5.1 percent), as it has for past several fiscal years. Unemployment in the Commonwealth and at the national level continued to improve during the fiscal year, reaching 2.9 percent and 3.8 percent, respectively. During fiscal year 2019, total taxable sales growth in the Commonwealth mirrored fiscal year 2018, remaining at 1.9 percent. Economic indicators show that during fiscal year 2019, the housing market in the Commonwealth experienced a 1.0 percent decrease compared to an increase of 1.7 percent in fiscal year 2018. Additionally, housing prices in the Commonwealth again showed a positive change for fiscal year 2019, with an increase of approximately 4.4 percent, compared to just over 5.7 percent at the national level. Many major economic indicators show that the Commonwealth’s growth was moderately slow during the fiscal year as it has been during most of the economic expansion. The Commonwealth continues to fall behind the nation in most areas, which reflects its reliance on the slower growing federal employment and other less unstable industries.

Requests for Information

This financial report is designed to provide a general overview of the Commonwealth’s finances for all those with an interest in the government’s finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the State Comptroller’s Office, Commonwealth of Virginia, P. O. Box 1971, Richmond, Virginia 23218. This report is also available for download at www.doa.virginia.gov.

The Commonwealth’s component units issue their own separate financial statements. Contact information regarding each component unit is provided in Note 1.B.
## Statement of Net Position

June 30, 2019  
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Assets and Deferred Outflows of Resources</th>
<th>Governmental Activities</th>
<th>Business-type Activities</th>
<th>Total</th>
<th>Component Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and Cash Equivalents (Notes 1 and 8)</td>
<td>$5,743,647</td>
<td>$1,813,603</td>
<td>$7,557,250</td>
<td>$2,997,691</td>
</tr>
<tr>
<td>Investments (Notes 1 and 8)</td>
<td>3,249,314</td>
<td>2,746,184</td>
<td>5,995,498</td>
<td>12,698,269</td>
</tr>
<tr>
<td>Assets Held Pending Distribution (Note 1)</td>
<td>—</td>
<td>112,983</td>
<td>112,983</td>
<td>—</td>
</tr>
<tr>
<td>Receivables, Net (Notes 1 and 9)</td>
<td>4,645,524</td>
<td>440,431</td>
<td>5,085,955</td>
<td>15,186,399</td>
</tr>
<tr>
<td>Contributions Receivable, Net (Notes 1 and 10)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>631,088</td>
</tr>
<tr>
<td>Internal Balances (Note 1)</td>
<td>89,117</td>
<td>(89,117)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Due from Primary Government (Note 11)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>30,603</td>
</tr>
<tr>
<td>Due from Component Units (Note 11)</td>
<td>31,256</td>
<td>—</td>
<td>31,256</td>
<td>119,255</td>
</tr>
<tr>
<td>Due from External Parties (Fiduciary Funds) (Note 11)</td>
<td>66,283</td>
<td>—</td>
<td>66,283</td>
<td>—</td>
</tr>
<tr>
<td>Inventory (Note 1)</td>
<td>172,381</td>
<td>94,905</td>
<td>267,286</td>
<td>146,518</td>
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<tr>
<td>Prepaid Items (Note 1)</td>
<td>116,500</td>
<td>3,309</td>
<td>119,809</td>
<td>143,673</td>
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<tr>
<td>Other Assets (Notes 1 and 12)</td>
<td>3,743</td>
<td>207</td>
<td>3,950</td>
<td>107,160</td>
</tr>
<tr>
<td>Loans Receivable from Primary Government (Notes 1 and 11)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>189,935</td>
</tr>
<tr>
<td>Loans Receivable from Component Units (Notes 1 and 11)</td>
<td>4,197</td>
<td>—</td>
<td>4,197</td>
<td>—</td>
</tr>
<tr>
<td>Restricted Cash and Cash Equivalents (Notes 8 and 13)</td>
<td>1,572,114</td>
<td>—</td>
<td>1,572,114</td>
<td>2,455,996</td>
</tr>
<tr>
<td>Restricted Investments (Notes 8 and 13)</td>
<td>334,896</td>
<td>—</td>
<td>334,896</td>
<td>7,333,018</td>
</tr>
<tr>
<td>Other Restricted Assets (Note 13)</td>
<td>134,598</td>
<td>5,067</td>
<td>139,665</td>
<td>379,352</td>
</tr>
<tr>
<td>Nondepreciable Capital Assets (Notes 1 and 14)</td>
<td>8,639,167</td>
<td>10,887</td>
<td>8,650,054</td>
<td>3,509,531</td>
</tr>
<tr>
<td>Depreciable Capital Assets, Net (Notes 1 and 14)</td>
<td>25,164,881</td>
<td>29,629</td>
<td>25,194,510</td>
<td>18,622,568</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td>49,967,618</td>
<td>5,168,088</td>
<td>55,135,706</td>
<td>64,547,056</td>
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</table>

<table>
<thead>
<tr>
<th>Liabilities and Deferred Inflows of Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts Payable (Notes 1 and 26)</td>
</tr>
<tr>
<td>Amounts Due to Other Governments</td>
</tr>
<tr>
<td>Due to Primary Government (Note 11)</td>
</tr>
<tr>
<td>Due to Component Units (Note 11)</td>
</tr>
<tr>
<td>Due to External Parties (Fiduciary Funds) (Note 11)</td>
</tr>
<tr>
<td>Unearned Revenue (Note 1)</td>
</tr>
<tr>
<td>Obligations Under Securities Lending (Notes 1 and 8)</td>
</tr>
<tr>
<td>Due to Claimants, Participants, Escrows and Providers (Note 1)</td>
</tr>
<tr>
<td>Other Liabilities (Notes 1, 16, and 27)</td>
</tr>
<tr>
<td>Loans Payable to Primary Government (Notes 1 and 11)</td>
</tr>
<tr>
<td>Loans Payable to Component Units (Notes 1 and 11)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Claims Payable (Notes 1 and 25):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Due Within One Year</td>
</tr>
<tr>
<td>Due in More Than One Year</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Long-term Liabilities (Notes 1, 23, 24, and 28):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Due Within One Year</td>
</tr>
<tr>
<td>Due in More Than One Year</td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Deferred Inflows of Resources (Notes 1, 15, 16, 17, 19, and 38)</th>
</tr>
</thead>
<tbody>
<tr>
<td>---------------------------------</td>
</tr>
<tr>
<td>Total Liabilities and Deferred Inflows of Resources</td>
</tr>
</tbody>
</table>

The accompanying notes are an integral part of this financial statement.
<table>
<thead>
<tr>
<th>Net Position</th>
<th>Governmental Activities</th>
<th>Business-type Activities</th>
<th>Total</th>
<th>Component Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net Investment in Capital Assets</strong></td>
<td>26,031,917</td>
<td>39,998</td>
<td>26,071,915</td>
<td>12,057,334</td>
</tr>
<tr>
<td><strong>Restricted For:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nonexpendable:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher Education</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>4,408,376</td>
</tr>
<tr>
<td>Permanent Funds</td>
<td>39,073</td>
<td>—</td>
<td>39,073</td>
<td>—</td>
</tr>
<tr>
<td>Other</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>171,291</td>
</tr>
<tr>
<td><strong>Expendable:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture and Forestry</td>
<td>8,949</td>
<td>—</td>
<td>8,949</td>
<td>—</td>
</tr>
<tr>
<td>Bond Indenture</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>3,103,521</td>
</tr>
<tr>
<td>Capital Projects/Construction/Capital Acquisition</td>
<td>38,849</td>
<td>—</td>
<td>38,849</td>
<td>1,861,630</td>
</tr>
<tr>
<td>Contract and Debt Administration</td>
<td>656</td>
<td>—</td>
<td>656</td>
<td>—</td>
</tr>
<tr>
<td>Debt Service</td>
<td>127,747</td>
<td>—</td>
<td>127,747</td>
<td>160,936</td>
</tr>
<tr>
<td>Economic and Technological Development</td>
<td>37</td>
<td>—</td>
<td>37</td>
<td>—</td>
</tr>
<tr>
<td>Educational and Training Programs</td>
<td>2,746</td>
<td>—</td>
<td>2,746</td>
<td>—</td>
</tr>
<tr>
<td>Environmental Quality and Natural Resource Preservation</td>
<td>22,639</td>
<td>—</td>
<td>22,639</td>
<td>135,721</td>
</tr>
<tr>
<td>Gifts and Grants</td>
<td>110,299</td>
<td>—</td>
<td>110,299</td>
<td>6,706,957</td>
</tr>
<tr>
<td>Health and Public Safety</td>
<td>61,949</td>
<td>—</td>
<td>61,949</td>
<td>—</td>
</tr>
<tr>
<td>Higher Education</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>6,706,957</td>
</tr>
<tr>
<td>Literary Fund</td>
<td>42,900</td>
<td>—</td>
<td>42,900</td>
<td>—</td>
</tr>
<tr>
<td>Lottery Proceeds Fund</td>
<td>37,659</td>
<td>—</td>
<td>37,659</td>
<td>—</td>
</tr>
<tr>
<td><strong>Net Other Postemployment Benefit - Virginia Sickness and Disability Program</strong></td>
<td>112,865</td>
<td>4,161</td>
<td>117,026</td>
<td>72,053</td>
</tr>
<tr>
<td>Permanent Funds</td>
<td>1,850</td>
<td>—</td>
<td>1,850</td>
<td>—</td>
</tr>
<tr>
<td>Revenue Stabilization Fund</td>
<td>629,654</td>
<td>—</td>
<td>629,654</td>
<td>—</td>
</tr>
<tr>
<td>Transportation Activities</td>
<td>952,637</td>
<td>—</td>
<td>952,637</td>
<td>—</td>
</tr>
<tr>
<td>Unemployment Compensation Trust Fund</td>
<td>—</td>
<td>1,480,964</td>
<td>1,480,964</td>
<td>—</td>
</tr>
<tr>
<td>Virginia Pooled Investment Program</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>7,760</td>
</tr>
<tr>
<td>Virginia Water Supply Assistance Grant Fund</td>
<td>2,154</td>
<td>—</td>
<td>2,154</td>
<td>—</td>
</tr>
<tr>
<td>Other</td>
<td>1,814</td>
<td>—</td>
<td>1,814</td>
<td>9,107</td>
</tr>
<tr>
<td><strong>Unrestricted</strong></td>
<td>(3,483,487)</td>
<td>946,854</td>
<td>(2,536,633)</td>
<td>938,275</td>
</tr>
<tr>
<td><strong>Total Net Position</strong></td>
<td>$ 24,742,907</td>
<td>$ 2,471,977</td>
<td>$ 27,214,884</td>
<td>$ 29,632,961</td>
</tr>
</tbody>
</table>
Statement of Activities
For the Fiscal Year Ended June 30, 2019
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Functions/Programs</th>
<th>Program Revenues</th>
<th>Expenses</th>
<th>Charges for Services</th>
<th>Operating Grants and Contributions</th>
<th>Capital Grants and Contributions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Government</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Governmental Activities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Government</td>
<td>$ 3,217,820</td>
<td>$ 307,133</td>
<td>$ 119,151</td>
<td>$ 17,998</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>11,103,677</td>
<td>684,332</td>
<td>1,153,240</td>
<td>8,370</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>4,927,117</td>
<td>826,744</td>
<td>58,939</td>
<td>1,467,989</td>
<td></td>
</tr>
<tr>
<td>Resources and Economic Development</td>
<td>1,027,271</td>
<td>399,564</td>
<td>188,766</td>
<td>32,509</td>
<td></td>
</tr>
<tr>
<td>Individual and Family Services</td>
<td>16,566,424</td>
<td>279,464</td>
<td>9,346,175</td>
<td>144</td>
<td></td>
</tr>
<tr>
<td>Administration of Justice</td>
<td>2,946,304</td>
<td>299,381</td>
<td>60,962</td>
<td>1,443</td>
<td></td>
</tr>
<tr>
<td>Interest and Charges on Long-term Debt</td>
<td>256,962</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Total Governmental Activities</td>
<td>40,045,575</td>
<td>2,796,618</td>
<td>10,927,233</td>
<td>1,528,453</td>
<td></td>
</tr>
<tr>
<td><strong>Business-type Activities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia Lottery</td>
<td>1,642,754</td>
<td>2,293,897</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Virginia College Savings Plan</td>
<td>61,321</td>
<td>306,444</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Unemployment Compensation</td>
<td>273,566</td>
<td>410,995</td>
<td>—</td>
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<tr>
<td>Alcoholic Beverage Control</td>
<td>699,242</td>
<td>903,299</td>
<td>32</td>
<td>—</td>
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<tr>
<td>Risk Management</td>
<td>14,894</td>
<td>13,300</td>
<td>—</td>
<td>—</td>
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<tr>
<td>Local Choice Health Care</td>
<td>473,076</td>
<td>482,048</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Line of Duty</td>
<td>17,836</td>
<td>17,840</td>
<td>—</td>
<td>—</td>
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<tr>
<td>Virginia Industries for the Blind</td>
<td>50,158</td>
<td>51,341</td>
<td>—</td>
<td>—</td>
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<tr>
<td>Consolidated Laboratory</td>
<td>10,552</td>
<td>11,685</td>
<td>—</td>
<td>—</td>
<td></td>
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<tr>
<td>eVA Procurement System</td>
<td>20,797</td>
<td>21,437</td>
<td>—</td>
<td>—</td>
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<tr>
<td>Department of Environmental Quality Title V</td>
<td>10,179</td>
<td>11,985</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Wireless E-911</td>
<td>44,134</td>
<td>63,464</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Museum and Library Gift Shops</td>
<td>7,221</td>
<td>7,428</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Behavioral Health Canteen and Work Activity</td>
<td>299</td>
<td>333</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Total Business-type Activities</td>
<td>3,326,029</td>
<td>4,595,496</td>
<td>32</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Total Primary Government</td>
<td>$ 43,371,604</td>
<td>$ 7,392,114</td>
<td>$ 10,927,265</td>
<td>$ 1,528,453</td>
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</tr>
<tr>
<td><strong>Component Units</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia Housing Development Authority</td>
<td>$ 354,988</td>
<td>$ 368,588</td>
<td>$ 113,658</td>
<td>$ —</td>
<td></td>
</tr>
<tr>
<td>Virginia Public School Authority</td>
<td>127,670</td>
<td>125,391</td>
<td>8,143</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Virginia Resources Authority</td>
<td>158,302</td>
<td>121,842</td>
<td>26,979</td>
<td>90,044</td>
<td></td>
</tr>
<tr>
<td>Virginia College Building Authority</td>
<td>727,558</td>
<td>67,414</td>
<td>42,562</td>
<td>3,753</td>
<td></td>
</tr>
<tr>
<td>Nonmajor</td>
<td>16,854,152</td>
<td>11,795,112</td>
<td>2,718,998</td>
<td>702,430</td>
<td></td>
</tr>
<tr>
<td>Total Component Units</td>
<td>$ 18,222,670</td>
<td>$ 12,478,347</td>
<td>$ 2,910,340</td>
<td>$ 796,227</td>
<td></td>
</tr>
</tbody>
</table>

The accompanying notes are an integral part of this financial statement.
### Net (Expense) Revenue and Changes in Net Position

#### Primary Government

<table>
<thead>
<tr>
<th>Governmental Activities</th>
<th>Business-type Activities</th>
<th>Total</th>
<th>Component Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ (2,773,538)</td>
<td>$</td>
<td>$ (2,773,538)</td>
<td>$</td>
</tr>
<tr>
<td>(9,257,735)</td>
<td>—</td>
<td>(9,257,735)</td>
<td>—</td>
</tr>
<tr>
<td>(2,573,445)</td>
<td>—</td>
<td>(2,573,445)</td>
<td>—</td>
</tr>
<tr>
<td>(406,432)</td>
<td>—</td>
<td>(406,432)</td>
<td>—</td>
</tr>
<tr>
<td>(6,940,641)</td>
<td>—</td>
<td>(6,940,641)</td>
<td>—</td>
</tr>
<tr>
<td>(2,584,518)</td>
<td>—</td>
<td>(2,584,518)</td>
<td>—</td>
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<tr>
<td>(256,962)</td>
<td>—</td>
<td>(256,962)</td>
<td>—</td>
</tr>
<tr>
<td>(24,793,271)</td>
<td>—</td>
<td>(24,793,271)</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>651,143</td>
<td>651,143</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>245,123</td>
<td>245,123</td>
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<tr>
<td></td>
<td>137,429</td>
<td>137,429</td>
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</tr>
<tr>
<td></td>
<td>204,089</td>
<td>204,089</td>
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</tr>
<tr>
<td></td>
<td>(1,594)</td>
<td>(1,594)</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>8,972</td>
<td>8,972</td>
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<td>4</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>1,183</td>
<td>1,183</td>
<td>—</td>
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<tr>
<td></td>
<td>1,133</td>
<td>1,133</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>640</td>
<td>640</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>1,806</td>
<td>1,806</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>19,330</td>
<td>19,330</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>207</td>
<td>207</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>34</td>
<td>34</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>1,269,499</td>
<td>1,269,499</td>
<td>—</td>
</tr>
<tr>
<td>(24,793,271)</td>
<td>1,269,499</td>
<td>(23,523,772)</td>
<td>—</td>
</tr>
</tbody>
</table>

Continued on next page
<table>
<thead>
<tr>
<th>General Revenues</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Taxes</strong></td>
<td><strong>Primary Government</strong></td>
<td><strong>Business-type Activities</strong></td>
<td><strong>Total</strong></td>
<td><strong>Component Units</strong></td>
</tr>
<tr>
<td>Individual and Fiduciary Income</td>
<td>14,872,136</td>
<td>—</td>
<td>14,872,136</td>
<td>—</td>
</tr>
<tr>
<td>Sales and Use</td>
<td>5,457,799</td>
<td>—</td>
<td>5,457,799</td>
<td>—</td>
</tr>
<tr>
<td>Corporation Income</td>
<td>923,683</td>
<td>—</td>
<td>923,683</td>
<td>—</td>
</tr>
<tr>
<td>Motor Fuel</td>
<td>1,083,719</td>
<td>—</td>
<td>1,083,719</td>
<td>—</td>
</tr>
<tr>
<td>Motor Vehicle Sales and Use</td>
<td>971,987</td>
<td>—</td>
<td>971,987</td>
<td>—</td>
</tr>
<tr>
<td>Communications Sales and Use</td>
<td>359,011</td>
<td>—</td>
<td>359,011</td>
<td>—</td>
</tr>
<tr>
<td>Deeds, Contracts, Wills, and Suits</td>
<td>442,970</td>
<td>—</td>
<td>442,970</td>
<td>—</td>
</tr>
<tr>
<td>Premiums of Insurance Companies</td>
<td>554,299</td>
<td>—</td>
<td>554,299</td>
<td>—</td>
</tr>
<tr>
<td>Alcoholic Beverage Sales</td>
<td>174,144</td>
<td>—</td>
<td>174,144</td>
<td>—</td>
</tr>
<tr>
<td>Tobacco Products</td>
<td>151,287</td>
<td>—</td>
<td>151,287</td>
<td>—</td>
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<tr>
<td>Estate</td>
<td>216</td>
<td>—</td>
<td>216</td>
<td>—</td>
</tr>
<tr>
<td>Public Service Corporations</td>
<td>111,996</td>
<td>—</td>
<td>111,996</td>
<td>—</td>
</tr>
<tr>
<td>Beer and Beverage Excise</td>
<td>41,249</td>
<td>—</td>
<td>41,249</td>
<td>—</td>
</tr>
<tr>
<td>Wine and Spirits/ABC Liter</td>
<td>29,484</td>
<td>—</td>
<td>29,484</td>
<td>—</td>
</tr>
<tr>
<td>Bank Stock</td>
<td>29,780</td>
<td>—</td>
<td>29,780</td>
<td>—</td>
</tr>
<tr>
<td>Other Taxes</td>
<td>518,694</td>
<td>9,141</td>
<td>527,835</td>
<td>—</td>
</tr>
</tbody>
</table>

| **Operating Appropriations from Primary Government** | — | — | — | 2,468,873 |
| **Unrestricted Grants and Contributions** | 60,108 | — | 60,108 | 116,904 |
| **Investment Earnings** | 238,588 | 1,841 | 240,429 | 576,875 |
| **Miscellaneous** | 368,744 | 414 | 369,158 | 168,114 |
| **Transfers** | 875,396 | (875,396) | — | — |
| **Contributions to Permanent and Term Endowments** | — | — | — | 491,028 |

| **Total General Revenues, Transfers, and Contributions** | 27,265,290 | (864,000) | 26,401,290 | 3,821,794 |
| **Change in Net Position** | 2,472,019 | 405,499 | 2,877,518 | 1,784,038 |
| **Net Position, July 1, as restated (Note 2)** | 22,270,888 | 2,066,478 | 24,337,366 | 27,848,923 |
| **Net Position, June 30** | $24,742,907 | $2,471,977 | $27,214,884 | $29,632,961 |

The accompanying notes are an integral part of this financial statement.
Governmental Funds

General Fund

The General Fund accounts for transactions related to resources received and used for those services traditionally provided by a state government, which are not accounted for in any other fund.

Special Revenue Funds

Special Revenue Funds account for specific revenue sources that are restricted or committed to finance particular functions and activities of the Commonwealth.

The Commonwealth Transportation Fund accounts for the revenues and expenditures associated with highway operations, maintenance, construction, and other transportation related activities. Funding for these programs is provided from highway user taxes, fees, and funds received from the federal government.

The Federal Trust Fund accounts for all federal dollars received by the Commonwealth except those received by the Commonwealth Transportation Fund, the Unemployment Compensation Fund, certain Medicaid reimbursements recorded in the General Fund, the Grant Anticipation Revenue Notes and Build America Bond Subsidies reported in the Debt Service Fund, and institutions of higher education. The entire fund is restricted pursuant to federal regulations.

The Literary Fund accounts for revenues from fines, forfeitures, and proceeds from unclaimed property used primarily to support public education in the Commonwealth. This fund provides low interest loans to school divisions for construction, renovations, and expansion of school buildings. The entire fund is constitutionally restricted for public schools.

Nonmajor Governmental Funds include those Special Revenue, Debt Service, Capital Projects, and Permanent Funds listed on page 225 in the Combining and Individual Fund Statements and Schedules section of this report.
Balance Sheet - Governmental Funds

June 30, 2019

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Assets and Deferred Outflows of Resources</th>
<th>General</th>
<th>Commonwealth Transportation</th>
<th>Federal Trust</th>
<th>Literary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and Cash Equivalents (Notes 1 and 8)</td>
<td>$ 316,430</td>
<td>$ 3,480,052</td>
<td>$ 170,171</td>
<td>$ 108,203</td>
</tr>
<tr>
<td>Investments (Notes 1 and 8)</td>
<td>2,986,289</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Receivables, Net (Notes 1 and 9)</td>
<td>2,111,585</td>
<td>524,941</td>
<td>1,585,726</td>
<td>135,274</td>
</tr>
<tr>
<td>Due from Other Funds (Note 11)</td>
<td>44,048</td>
<td>64,838</td>
<td>171</td>
<td>2,420</td>
</tr>
<tr>
<td>Due from External Parties (Fiduciary Funds) (Note 11)</td>
<td>3,773</td>
<td>—</td>
<td>21,537</td>
<td>—</td>
</tr>
<tr>
<td>Interfund Receivable (Note 11)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Inventory (Note 1)</td>
<td>28,801</td>
<td>95,483</td>
<td>23,813</td>
<td>—</td>
</tr>
<tr>
<td>Prepaid Items (Note 1)</td>
<td>73,888</td>
<td>14,453</td>
<td>6,136</td>
<td>—</td>
</tr>
<tr>
<td>Other Assets (Notes 1 and 12)</td>
<td>1,217</td>
<td>282</td>
<td>1,607</td>
<td>—</td>
</tr>
<tr>
<td>Loans Receivable from Component Units (Notes 1 and 11)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Restricted Cash and Cash Equivalents (Notes 8 and 13)</td>
<td>—</td>
<td>432,617</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total Assets</td>
<td>5,566,031</td>
<td>4,612,666</td>
<td>1,809,161</td>
<td>245,897</td>
</tr>
</tbody>
</table>

Deferred Outflows of Resources (Notes 1 and 15)

| Total Assets and Deferred Outflows of Resources | $ 5,566,031 | $ 4,612,666 | $ 1,809,161 | $ 245,897 |

Liabilities, Deferred Inflows of Resources, and Fund Balances

| Accounts Payable (Notes 1 and 26) | $ 380,257 | $ 511,252 | $ 85,715 | $ 1 |
| Amounts Due to Other Governments   | 440,485 | 72,737 | 424,113 | — |
| Due to Other Funds (Note 11)       | 40,113 | 61,829 | 9,911 | — |
| Due to Component Units (Note 11)   | 393 | — | 3,401 | — |
| Due to External Parties (Fiduciary Funds) (Note 11) | 19,085 | 5,156 | 2,421 | — |
| Interfund Payable (Note 11)        | 2,535 | 3,401 | 25,619 | — |
| Unearned Revenue (Note 1)          | 70 | 165,200 | 51,877 | — |
| Obligations Under Securities Lending Program (Notes 1 and 8) | 314,069 | 230,097 | 2,508 | 13,061 |
| Due to Claimants, Participants, Escrows and Providers (Note 1) | — | — | 308 | — |
| Other Liabilities (Notes 1 and 27)  | 1,632,522 | 1,242 | 990,608 | — |
| Loans Payable to Component Units (Notes 1 and 11) | — | — | — | 189,935 |
| Long-term Liabilities Due Within One Year (Notes 1, 23, and 28) | 4,634 | 440 | 112 | — |
| Total Liabilities                  | 2,834,163 | 1,051,354 | 1,596,593 | 202,997 |

Deferred Inflows of Resources (Notes 1, 15, and 28)

| Total Liabilities and Deferred Inflows of Resources | 3,963,358 | 1,729,948 | 1,681,486 | 228,063 |

Fund Balances (Note 3):

| Nonspendable                                   | 102,685 | 109,936 | 29,949 | — |
| Restricted                                     | 669,467 | 501,620 | 97,726 | 17,834 |
| Committed                                      | 1,094,750 | 2,271,162 | — | — |
| Assigned                                       | — | — | — | — |
| Unassigned                                     | (264,229) | — | — | — |
| Total Fund Balances                            | 1,602,673 | 2,882,718 | 127,675 | 17,834 |

Total Liabilities, Deferred Inflows of Resources, and Fund Balances

| $ 5,566,031 | $ 4,612,666 | $ 1,809,161 | $ 245,897 |

The accompanying notes are an integral part of this financial statement.
<table>
<thead>
<tr>
<th>Nonmajor Governmental Funds</th>
<th>Total Governmental Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 1,920,330</td>
<td>$ 5,995,186</td>
</tr>
<tr>
<td>597,921</td>
<td>3,584,210</td>
</tr>
<tr>
<td>175,960</td>
<td>4,533,486</td>
</tr>
<tr>
<td>47,860</td>
<td>159,337</td>
</tr>
<tr>
<td>40,726</td>
<td>66,036</td>
</tr>
<tr>
<td>271,152</td>
<td>271,152</td>
</tr>
<tr>
<td>7,203</td>
<td>155,300</td>
</tr>
<tr>
<td>9,964</td>
<td>104,441</td>
</tr>
<tr>
<td>637</td>
<td>3,743</td>
</tr>
<tr>
<td>4,197</td>
<td>4,197</td>
</tr>
<tr>
<td>—</td>
<td>432,617</td>
</tr>
<tr>
<td>3,075,950</td>
<td>15,309,705</td>
</tr>
<tr>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>$ 3,075,950</td>
<td>$ 15,309,705</td>
</tr>
<tr>
<td>$ 76,641</td>
<td>$ 1,053,866</td>
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<tr>
<td>6,280</td>
<td>943,615</td>
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<tr>
<td>69,475</td>
<td>181,328</td>
</tr>
<tr>
<td>12,802</td>
<td>16,596</td>
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<tr>
<td>2,317</td>
<td>28,979</td>
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<tr>
<td>—</td>
<td>31,555</td>
</tr>
<tr>
<td>29,945</td>
<td>247,092</td>
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<tr>
<td>25,745</td>
<td>585,480</td>
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<tr>
<td>451,851</td>
<td>452,159</td>
</tr>
<tr>
<td>134,381</td>
<td>2,758,753</td>
</tr>
<tr>
<td>—</td>
<td>189,935</td>
</tr>
<tr>
<td>266</td>
<td>5,452</td>
</tr>
<tr>
<td>809,703</td>
<td>6,494,810</td>
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<tr>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>34,791</td>
<td>1,952,539</td>
</tr>
<tr>
<td>844,494</td>
<td>8,447,349</td>
</tr>
<tr>
<td>56,211</td>
<td>298,781</td>
</tr>
<tr>
<td>1,525,862</td>
<td>2,812,509</td>
</tr>
<tr>
<td>677,990</td>
<td>4,043,902</td>
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<td>34,013</td>
<td>34,013</td>
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<tr>
<td>(62,620)</td>
<td>(326,849)</td>
</tr>
<tr>
<td>2,231,456</td>
<td>6,862,356</td>
</tr>
<tr>
<td>$ 3,075,950</td>
<td>$ 15,309,705</td>
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</tbody>
</table>
Reconciliation of the Balance Sheet – Governmental Funds to the Government-wide Statement of Net Position

June 30, 2019
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total fund balances - governmental funds (see Balance Sheet - Governmental Funds)</td>
<td>$6,862,356</td>
</tr>
<tr>
<td>When the amount employers have paid into an other post-employment benefit (OPEB) plan combined with the plan’s assets exceeds the amount that is required to pay the actuarially determined future benefits, the cost of employer contributions are reported as expenditures in the governmental funds. However, the Statement of Net Position includes the Net OPEB asset among the assets of the primary government as a whole.</td>
<td>132,163</td>
</tr>
<tr>
<td>When capital assets (land, buildings, equipment, construction-in-progress, intangible assets, and/or infrastructure) that are to be used in governmental activities are purchased or constructed, the costs of those assets are reported as expenditures in governmental funds. However, the Statement of Net Position includes those capital assets among the assets of the primary government as a whole.</td>
<td></td>
</tr>
<tr>
<td>Nondepreciable Capital Assets</td>
<td>8,605,386</td>
</tr>
<tr>
<td>Depreciable Capital Assets</td>
<td>25,035,703</td>
</tr>
<tr>
<td>Assets to be received for Long-term Debt Service requirements are not reported in the fund statements.</td>
<td>76,502</td>
</tr>
<tr>
<td>Deferred outflows associated with pension and other postemployment benefit related costs are long-term in nature and, therefore, not reported in the funds.</td>
<td>684,763</td>
</tr>
<tr>
<td>Deferred outflows associated with loss on debt refundings are long-term in nature and, therefore, not reported in the funds.</td>
<td>72,669</td>
</tr>
<tr>
<td>Long-term liabilities applicable to the primary government's governmental activities are not due and payable in the current period and, accordingly, are not reported as fund liabilities. All liabilities, both current and long-term, are reported in the Statement of Net Position.</td>
<td></td>
</tr>
<tr>
<td>Pension Liability</td>
<td>(3,740,506)</td>
</tr>
<tr>
<td>Net OPEB Liability</td>
<td>(792,177)</td>
</tr>
<tr>
<td>Total OPEB Liability</td>
<td>(557,268)</td>
</tr>
<tr>
<td>Capital Leases</td>
<td>(16,075)</td>
</tr>
<tr>
<td>Installment Purchases</td>
<td>(78,087)</td>
</tr>
<tr>
<td>Compensated Absences</td>
<td>(306,477)</td>
</tr>
<tr>
<td>Uninsured Employer's Fund</td>
<td>(22,562)</td>
</tr>
<tr>
<td>Bonds</td>
<td>(7,978,904)</td>
</tr>
<tr>
<td>Accrued Interest Payable</td>
<td>(77,798)</td>
</tr>
<tr>
<td>Other Obligations</td>
<td>(31,109)</td>
</tr>
<tr>
<td>Pollution Remediation Liability</td>
<td>(10,430)</td>
</tr>
<tr>
<td>Internal service funds are used by the primary government to charge costs to individual funds. The assets and deferred outflows, and liabilities and deferred inflows of internal service funds are included in governmental activities in the Statement of Net Position.</td>
<td>(224,371)</td>
</tr>
<tr>
<td>Other long-term payables are not due and payable in the current period and, therefore, are not reported in the funds.</td>
<td>(363,264)</td>
</tr>
<tr>
<td>Deferred inflows are not available to pay for current period expenditures and, therefore, are not reported in the funds.</td>
<td>1,341,611</td>
</tr>
<tr>
<td>Deferred inflows associated with Service Concession Arrangements capital assets are long-term in nature and, therefore, not reported in the funds.</td>
<td>(2,939,560)</td>
</tr>
<tr>
<td>Deferred inflows associated with pension and other postemployment benefit related costs are long-term in nature and, therefore, not reported in the funds.</td>
<td>(929,638)</td>
</tr>
<tr>
<td>Deferred inflows associated with gain on debt refundings are long-term in nature and, therefore, not reported in the funds.</td>
<td>(20)</td>
</tr>
<tr>
<td><strong>Net position of governmental activities (see Government-wide Statement of Net Position)</strong></td>
<td><strong>$ 24,742,907</strong></td>
</tr>
</tbody>
</table>

The accompanying notes are an integral part of this financial statement.
## Statement of Revenues, Expenditures, and Changes in Fund Balances - Governmental Funds

For the Fiscal Year Ended June 30, 2019

(Dollars in Thousands)

### Special Revenue

<table>
<thead>
<tr>
<th>Source Type</th>
<th>General</th>
<th>Commonwealth Transportation</th>
<th>Federal Trust</th>
<th>Literary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenues</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taxes</td>
<td>$21,406,963</td>
<td>$3,827,035</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rights and Privileges</td>
<td>93,508</td>
<td>700,434</td>
<td>134</td>
<td>482</td>
</tr>
<tr>
<td>Institutional Revenue</td>
<td>38,720</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest, Dividends, Rents, and Other Investment Income</td>
<td>185,366</td>
<td>81,463</td>
<td>1,530</td>
<td>14,619</td>
</tr>
<tr>
<td>Federal Grants and Contracts</td>
<td>10,173</td>
<td>1,081,561</td>
<td>10,777,508</td>
<td></td>
</tr>
<tr>
<td>Other (Note 29)</td>
<td>386,202</td>
<td>542,179</td>
<td>5,025</td>
<td>47,419</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td>$22,120,932</td>
<td>$6,232,672</td>
<td>$10,784,197</td>
<td>$62,520</td>
</tr>
</tbody>
</table>

### Expenditures

**Current:**

<table>
<thead>
<tr>
<th>Category</th>
<th>General</th>
<th>Commonwealth Transportation</th>
<th>Federal Trust</th>
<th>Literary</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Government</td>
<td>$2,440,560</td>
<td>87,798</td>
<td>123,188</td>
<td>500</td>
</tr>
<tr>
<td>Education</td>
<td>9,098,528</td>
<td>2,314</td>
<td>1,139,195</td>
<td>177,176</td>
</tr>
<tr>
<td>Transportation</td>
<td>203</td>
<td>5,429,862</td>
<td>20,031</td>
<td></td>
</tr>
<tr>
<td>Resources and Economic Development</td>
<td>433,707</td>
<td>20,388</td>
<td>180,039</td>
<td></td>
</tr>
<tr>
<td>Individual and Family Services</td>
<td>7,010,342</td>
<td>20,388</td>
<td>9,198,176</td>
<td></td>
</tr>
<tr>
<td>Administration of Justice</td>
<td>2,919,594</td>
<td>10,697</td>
<td>73,551</td>
<td></td>
</tr>
<tr>
<td>Capital Outlay</td>
<td>2,468</td>
<td>27,267</td>
<td>21,559</td>
<td></td>
</tr>
<tr>
<td>Debt Service:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal Retirement</td>
<td>—</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest and Charges</td>
<td>—</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Expenditures</strong></td>
<td>$21,905,402</td>
<td>$5,578,326</td>
<td>$10,755,739</td>
<td>$177,676</td>
</tr>
</tbody>
</table>

Revenues Over (Under) Expenditures: 215,530 555,440 20,142 115,156

**Other Financing Sources (Uses)**

<table>
<thead>
<tr>
<th>Source Type</th>
<th>General</th>
<th>Commonwealth Transportation</th>
<th>Federal Trust</th>
<th>Literary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfers In (Note 34)</td>
<td>951,729</td>
<td>16,113</td>
<td>1,689</td>
<td>131,955</td>
</tr>
<tr>
<td>Transfers Out (Note 34)</td>
<td>(414,827)</td>
<td>(459,940)</td>
<td>(10,022)</td>
<td></td>
</tr>
<tr>
<td>Notes Issued</td>
<td>2,713</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Insurance Recoveries</td>
<td>85</td>
<td>—</td>
<td>17</td>
<td>—</td>
</tr>
<tr>
<td>Capital Leases Issued</td>
<td>557</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Bonds Issued</td>
<td>—</td>
<td>311,715</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Premium on Debt Issuance</td>
<td>—</td>
<td>29,921</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Refunding Bonds Issued</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Payment to Refunded Bond Escrow Agents</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total Other Financing Sources (Uses)</strong></td>
<td>543,689</td>
<td>(98,906)</td>
<td>(8,316)</td>
<td>131,955</td>
</tr>
</tbody>
</table>

Net Change in Fund Balances: 759,219 555,440 20,142 16,799

Fund Balance, July 1, as restated (Note 2): 843,454 2,327,278 107,533 1,035

Fund Balance, June 30: $1,602,673 $2,882,718 $127,675 $17,834

The accompanying notes are an integral part of this financial statement.
<table>
<thead>
<tr>
<th>Nonmajor Governmental Funds</th>
<th>Total Governmental Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 441,702</td>
<td>$ 25,675,700</td>
</tr>
<tr>
<td>334,775</td>
<td>1,129,333</td>
</tr>
<tr>
<td>171,154</td>
<td>209,874</td>
</tr>
<tr>
<td>76,576</td>
<td>359,554</td>
</tr>
<tr>
<td>129,804</td>
<td>11,999,046</td>
</tr>
<tr>
<td>584,784</td>
<td>1,565,609</td>
</tr>
<tr>
<td>1,738,795</td>
<td>40,939,116</td>
</tr>
<tr>
<td>122,037</td>
<td>2,774,083</td>
</tr>
<tr>
<td>31,011</td>
<td>10,448,224</td>
</tr>
<tr>
<td>4,432</td>
<td>5,454,528</td>
</tr>
<tr>
<td>380,804</td>
<td>1,014,938</td>
</tr>
<tr>
<td>745,005</td>
<td>16,953,523</td>
</tr>
<tr>
<td>82,020</td>
<td>3,085,862</td>
</tr>
<tr>
<td>564,764</td>
<td>616,058</td>
</tr>
<tr>
<td>427,210</td>
<td>427,210</td>
</tr>
<tr>
<td>321,144</td>
<td>321,144</td>
</tr>
<tr>
<td>2,678,427</td>
<td>41,095,570</td>
</tr>
<tr>
<td>(939,632)</td>
<td>(156,454)</td>
</tr>
<tr>
<td>887,490</td>
<td>1,988,976</td>
</tr>
<tr>
<td>(221,549)</td>
<td>(1,106,338)</td>
</tr>
<tr>
<td>16,628</td>
<td>19,341</td>
</tr>
<tr>
<td>2,207</td>
<td>2,309</td>
</tr>
<tr>
<td>208</td>
<td>765</td>
</tr>
<tr>
<td>336,950</td>
<td>648,665</td>
</tr>
<tr>
<td>52,845</td>
<td>82,766</td>
</tr>
<tr>
<td>43,360</td>
<td>43,360</td>
</tr>
<tr>
<td>—</td>
<td>6,717</td>
</tr>
<tr>
<td>(49,308)</td>
<td>(49,308)</td>
</tr>
<tr>
<td>1,068,831</td>
<td>1,637,253</td>
</tr>
<tr>
<td>129,199</td>
<td>1,480,799</td>
</tr>
<tr>
<td>2,102,257</td>
<td>5,381,557</td>
</tr>
<tr>
<td>$ 2,231,456</td>
<td>$ 6,862,356</td>
</tr>
</tbody>
</table>
Reconciliation of the Statement of Revenues, Expenditures, and Changes in Fund Balances – Governmental Funds to the Government-wide Statement of Activities

For the Fiscal Year Ended June 30, 2019
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Change in fund balances - total government funds (See Statement of Revenues, Expenditures, and Changes in Fund Balances - Governmental Funds)</td>
<td>$1,480,799</td>
</tr>
</tbody>
</table>

When capital assets that are to be used in governmental activities are purchased or constructed, the resources expended for those assets are reported as expenditures in governmental funds. However, in the Statement of Activities, the cost of those assets is allocated over their estimated useful lives and reported as depreciation expense. As a result, fund balance decreases by the amount of financial resources expended, whereas net position decreases by the amount of depreciation expense charged for the year.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nondepreciable Capital Assets Constructed/Acquired</td>
<td>$1,752,761</td>
</tr>
<tr>
<td>Nondepreciable Capital Assets Disposed</td>
<td>$(41,541)</td>
</tr>
<tr>
<td>Depreciable Capital Assets Acquired</td>
<td>$334,463</td>
</tr>
<tr>
<td>Depreciable Capital Assets Disposed</td>
<td>$(248,988)</td>
</tr>
<tr>
<td>Depreciation Expense</td>
<td>$(1,299,166)</td>
</tr>
</tbody>
</table>

Debt proceeds provide current financial resources to governmental funds by issuing debt, which increases long-term debt in the Statement of Net Position.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt Issuance</td>
<td>$(648,665)</td>
</tr>
<tr>
<td>Capital Lease Proceeds</td>
<td>$(765)</td>
</tr>
<tr>
<td>Bond Premiums</td>
<td>$(82,766)</td>
</tr>
<tr>
<td>Refunding Bonds Issued</td>
<td>$(43,360)</td>
</tr>
<tr>
<td>Installment Purchase Proceeds</td>
<td>$(19,341)</td>
</tr>
</tbody>
</table>

Repayment of debt principal is an expenditure in the governmental funds, but the repayment reduces long-term debt in the Statement of Net Position.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment to Refunded Bond Escrow Agent</td>
<td>$427,210</td>
</tr>
</tbody>
</table>

Payment to Refunded Bond Escrow Agent is an expenditure in the governmental funds, but the refunding reduces long-term debt in the Statement of Net Position.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some revenues in the Statement of Activities do not provide current financial resources and, therefore, are deferred inflows of resources in the funds. Also, revenues related to prior periods that became available during the current period are reported in the funds but are eliminated in the Statement of Activities. This amount is the net adjustment.</td>
<td>$50,696</td>
</tr>
</tbody>
</table>

Increases/decreases of expenses reported in the Statement of Activities that do not require the use of, or provide, current financial resources and, therefore, are not reported in the governmental funds.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase (Decrease) in Net OPEB Asset</td>
<td>$8,275</td>
</tr>
<tr>
<td>(Increase) Decrease in Net Pension Liability</td>
<td>$265,785</td>
</tr>
<tr>
<td>(Increase) Decrease in Net OPEB Liability</td>
<td>8,994</td>
</tr>
<tr>
<td>(Increase) Decrease in Total OPEB Liability</td>
<td>14,576</td>
</tr>
<tr>
<td>(Increase) Decrease in Other Long-term Liabilities</td>
<td>(6,538)</td>
</tr>
<tr>
<td>(Increase) Decrease in Compensated Absences</td>
<td>(7,046)</td>
</tr>
<tr>
<td>(Increase) Decrease in Interest Expense, Amortization of Long-term Debt premium and discounts, and Accrued Interest Liability</td>
<td>79,257</td>
</tr>
<tr>
<td>(Increase) Decrease in Other Liabilities</td>
<td>416</td>
</tr>
</tbody>
</table>

Net (increase) decrease in Due to Component Units for capital and other projects resulting from appropriation reductions or amounts which are not reported as expenditures in the fund statements.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net (increase) decrease in Due to Component Units for capital and other projects resulting from appropriation reductions or amounts which are not reported as expenditures in the fund statements.</td>
<td>$152,268</td>
</tr>
</tbody>
</table>

Net revenue (expenses) of certain activities of internal service funds is reported within governmental activities.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net revenue (expenses) of certain activities of internal service funds is reported within governmental activities.</td>
<td>$202,750</td>
</tr>
</tbody>
</table>

Deferred inflows and outflows associated with pension and OPEB costs are not included in the funds.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deferred inflows and outflows associated with pension and OPEB costs are not included in the funds.</td>
<td>$(1,740)</td>
</tr>
</tbody>
</table>

Amortization of deferred inflows and/or outflows associated with Service Concession Arrangements capital assets are not included in the funds.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amortization of deferred inflows and/or outflows associated with Service Concession Arrangements capital assets are not included in the funds.</td>
<td>$44,467</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in net position of governmental activities (See Government-wide Statement of Activities)</td>
<td>$2,472,019</td>
</tr>
</tbody>
</table>

The accompanying notes are an integral part of this financial statement.
Proprietary Funds

The Proprietary Funds account for operations that are financed and operated in a manner similar to private business enterprises. It is the intent that the cost of providing such goods or services will be recovered through user charges.

Major Enterprise Funds

The Virginia Lottery accounts for all receipts and expenses from the operations of the Virginia Lottery.

The Virginia College Savings Plan (The Plan) administers the Prepaid529 Program, which is a defined benefit program that services contracts for actuarially determined amounts that provide for full future tuition and mandatory fee payments at Virginia’s higher education institutions and differing payouts at private or out-of-state institutions. The fund accounts for the actuarially determined contributions and payments for approved expenses. Eide Bailly, LLP, audits the Plan, and a separate report is issued.

The Unemployment Compensation Fund administers the temporary partial income replacement payments to unemployed covered workers.

Nonmajor Enterprise Funds include those operations of state agencies which are listed on page 237 in the Combining and Individual Fund Statements and Schedules section of this report.

Internal Service Funds include those operations of state agencies which are listed on page 253 in the Combining and Individual Fund Statements and Schedules section of this report.
### Statement of Fund Net Position - Proprietary Funds

**June 30, 2019**

(Dollars in Thousands)

#### Assets and Deferred Outflows of Resources

<table>
<thead>
<tr>
<th></th>
<th>Virginia Lottery</th>
<th>Virginia College Savings Plan</th>
<th>Unemployment Compensation</th>
<th>Nonmajor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Assets:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and Cash Equivalents (Notes 1 and 6)</td>
<td>$87,173</td>
<td>$67,629</td>
<td>$1,471,053</td>
<td>$187,748</td>
</tr>
<tr>
<td>Assets Held Pending Distribution (Note 1)</td>
<td>10,691</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Receivables, Net (Notes 1 and 9)</td>
<td>72,486</td>
<td>72,713</td>
<td>77,639</td>
<td>57,958</td>
</tr>
<tr>
<td>Due from Other Funds (Note 11)</td>
<td>—</td>
<td>—</td>
<td>816</td>
<td>998</td>
</tr>
<tr>
<td>Due from External Parties (Fiduciary Funds) (Note 11)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Due from Component Units (Note 11)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Inventory (Note 1)</td>
<td>9,456</td>
<td>—</td>
<td>—</td>
<td>85,449</td>
</tr>
<tr>
<td>Prepaid Items (Note 1)</td>
<td>500</td>
<td>785</td>
<td>—</td>
<td>2,024</td>
</tr>
<tr>
<td>Other Assets (Notes 1 and 12)</td>
<td>1</td>
<td>—</td>
<td>—</td>
<td>206</td>
</tr>
<tr>
<td><strong>Total Current Assets</strong></td>
<td>180,307</td>
<td>141,127</td>
<td>1,549,508</td>
<td>334,383</td>
</tr>
<tr>
<td><strong>Noncurrent Assets:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investments (Notes 1 and 8)</td>
<td>—</td>
<td>2,746,184</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Assets Held Pending Distribution (Note 1)</td>
<td>102,292</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Receivables, Net (Notes 1 and 9)</td>
<td>—</td>
<td>159,635</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Other Assets (Notes 1 and 12)</td>
<td>1,015</td>
<td>444</td>
<td>—</td>
<td>3,608</td>
</tr>
<tr>
<td>Nondepreciable Capital Assets (Notes 1 and 14)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>16,778</td>
</tr>
<tr>
<td>Depreciable Capital Assets, Net (Notes 1 and 14)</td>
<td>11,806</td>
<td>1,045</td>
<td>—</td>
<td>10,687</td>
</tr>
<tr>
<td><strong>Total Noncurrent Assets</strong></td>
<td>115,113</td>
<td>2,907,308</td>
<td>—</td>
<td>31,273</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td>295,420</td>
<td>3,048,435</td>
<td>1,549,508</td>
<td>365,656</td>
</tr>
<tr>
<td><strong>Deferred Outflows of Resources (Notes 1, 15, 16, 17, and 19)</strong></td>
<td>3,653</td>
<td>2,022</td>
<td>—</td>
<td>17,169</td>
</tr>
<tr>
<td><strong>Total Assets and Deferred Outflows of Resources</strong></td>
<td>299,073</td>
<td>3,050,457</td>
<td>1,549,508</td>
<td>382,825</td>
</tr>
</tbody>
</table>

#### Liabilities and Deferred Inflows of Resources

<table>
<thead>
<tr>
<th></th>
<th>Virginia Lottery</th>
<th>Virginia College Savings Plan</th>
<th>Unemployment Compensation</th>
<th>Nonmajor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Liabilities:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts Payable (Notes 1 and 26)</td>
<td>18,452</td>
<td>1,004</td>
<td>59</td>
<td>60,185</td>
</tr>
<tr>
<td>Amounts Due to Other Governments</td>
<td>—</td>
<td>—</td>
<td>4,486</td>
<td>7,925</td>
</tr>
<tr>
<td>Due to Other Funds (Note 11)</td>
<td>29,505</td>
<td>92</td>
<td>318</td>
<td>18,130</td>
</tr>
<tr>
<td>Due to External Parties (Fiduciary Funds) (Note 11)</td>
<td>194</td>
<td>83</td>
<td>—</td>
<td>711</td>
</tr>
<tr>
<td>Interfund Payable (Note 11)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>44,995</td>
</tr>
<tr>
<td>Unearned Revenue (Note 1)</td>
<td>1,567</td>
<td>—</td>
<td>—</td>
<td>3,995</td>
</tr>
<tr>
<td>Due to Claimants, Participants, Escrows and Providers (Note 1)</td>
<td>—</td>
<td>736</td>
<td>63,681</td>
<td>—</td>
</tr>
<tr>
<td>Obligations Under Securities Lending Program (Notes 1 and 8)</td>
<td>59,630</td>
<td>190</td>
<td>—</td>
<td>12,728</td>
</tr>
<tr>
<td>Other Liabilities (Notes 1 and 27)</td>
<td>70,036</td>
<td>11,853</td>
<td>—</td>
<td>136</td>
</tr>
<tr>
<td>Claims Payable Due Within One Year (Notes 1 and 25)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>59,221</td>
</tr>
<tr>
<td>Long-term Liabilities Due Within One Year (Notes 1, 23, and 28)</td>
<td>12,280</td>
<td>283,843</td>
<td>—</td>
<td>7,069</td>
</tr>
<tr>
<td><strong>Total Current Liabilities</strong></td>
<td>191,884</td>
<td>297,801</td>
<td>68,544</td>
<td>215,096</td>
</tr>
<tr>
<td><strong>Noncurrent Liabilities:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interfund Payable (Note 11)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Claims Payable Due in More Than One Year (Notes 1 and 25)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>28,637</td>
</tr>
<tr>
<td>Long-term Liabilities Due in More Than One Year (Notes 1, 23, and 28)</td>
<td>134,667</td>
<td>1,721,534</td>
<td>—</td>
<td>126,993</td>
</tr>
<tr>
<td><strong>Total Noncurrent Liabilities</strong></td>
<td>134,667</td>
<td>1,721,534</td>
<td>—</td>
<td>155,630</td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td>326,551</td>
<td>2,019,335</td>
<td>68,544</td>
<td>370,725</td>
</tr>
<tr>
<td><strong>Deferred Inflows of Resources (Notes 1, 15, 16, 17, and 19)</strong></td>
<td>4,988</td>
<td>1,758</td>
<td>—</td>
<td>20,314</td>
</tr>
<tr>
<td><strong>Total Liabilities and Deferred Inflows of Resources</strong></td>
<td>331,539</td>
<td>2,021,093</td>
<td>68,544</td>
<td>391,039</td>
</tr>
</tbody>
</table>

#### Net Position

<table>
<thead>
<tr>
<th></th>
<th>Virginia Lottery</th>
<th>Virginia College Savings Plan</th>
<th>Unemployment Compensation</th>
<th>Nonmajor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Investment in Capital Assets</td>
<td>11,806</td>
<td>1,045</td>
<td>—</td>
<td>27,147</td>
</tr>
<tr>
<td>Restricted for Net Other Postemployment Benefit - Virginia Sickness and Disability Program</td>
<td>873</td>
<td>362</td>
<td>—</td>
<td>2,266</td>
</tr>
<tr>
<td>Restricted for Unemployment Compensation</td>
<td>—</td>
<td>—</td>
<td>1,480,964</td>
<td>—</td>
</tr>
<tr>
<td>Unrestricted</td>
<td>(44,925)</td>
<td>1,027,957</td>
<td>—</td>
<td>(38,287)</td>
</tr>
<tr>
<td><strong>Total Net Position (Deficit) (Note 4)</strong></td>
<td>$32,246</td>
<td>$1,029,364</td>
<td>$1,480,964</td>
<td>$(6,214)</td>
</tr>
</tbody>
</table>

Some amounts reported for business-type activities in the Statement of Net Position are different because certain internal service fund assets and liabilities are included in business-type activities.

The accompanying notes are an integral part of this financial statement.
<table>
<thead>
<tr>
<th></th>
<th>Governmental Activities</th>
<th>Internal Service Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 1,813,603</td>
<td>$ 887,958</td>
<td></td>
</tr>
<tr>
<td>10.691</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>280,796</td>
<td>35,536</td>
<td></td>
</tr>
<tr>
<td>1,814</td>
<td>70,474</td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>247</td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>30,391</td>
<td></td>
</tr>
<tr>
<td>94,905</td>
<td>17,081</td>
<td></td>
</tr>
<tr>
<td>3,309</td>
<td>12,059</td>
<td></td>
</tr>
<tr>
<td>207</td>
<td>31,294</td>
<td></td>
</tr>
<tr>
<td>2,205,325</td>
<td>1,085,040</td>
<td></td>
</tr>
<tr>
<td>2,746,184</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>102,292</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>159,635</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>5,067</td>
<td>2,423</td>
<td></td>
</tr>
<tr>
<td>10,887</td>
<td>33,781</td>
<td></td>
</tr>
<tr>
<td>29,629</td>
<td>129,178</td>
<td></td>
</tr>
<tr>
<td>3,053,694</td>
<td>165,382</td>
<td></td>
</tr>
<tr>
<td>5,259,019</td>
<td>1,250,422</td>
<td></td>
</tr>
<tr>
<td>22,844</td>
<td>10,738</td>
<td></td>
</tr>
<tr>
<td>5,281,863</td>
<td>1,281,161</td>
<td></td>
</tr>
<tr>
<td>79,700</td>
<td>93,768</td>
<td></td>
</tr>
<tr>
<td>12,411</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>48,045</td>
<td>2,252</td>
<td></td>
</tr>
<tr>
<td>988</td>
<td>431</td>
<td></td>
</tr>
<tr>
<td>44,995</td>
<td>91,701</td>
<td></td>
</tr>
<tr>
<td>5,562</td>
<td>105,211</td>
<td></td>
</tr>
<tr>
<td>64,417</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>72,548</td>
<td>55,853</td>
<td></td>
</tr>
<tr>
<td>62,025</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>59,221</td>
<td>206,323</td>
<td></td>
</tr>
<tr>
<td>303,192</td>
<td>10,445</td>
<td></td>
</tr>
<tr>
<td>773,104</td>
<td>686,047</td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>102,901</td>
<td></td>
</tr>
<tr>
<td>28,637</td>
<td>677,648</td>
<td></td>
</tr>
<tr>
<td>1,983,194</td>
<td>123,944</td>
<td></td>
</tr>
<tr>
<td>2,011,831</td>
<td>904,493</td>
<td></td>
</tr>
<tr>
<td>2,784,935</td>
<td>1,470,549</td>
<td></td>
</tr>
<tr>
<td>27,060</td>
<td>12,883</td>
<td></td>
</tr>
<tr>
<td>2,811,995</td>
<td>1,483,423</td>
<td></td>
</tr>
<tr>
<td>39,998</td>
<td>122,863</td>
<td></td>
</tr>
<tr>
<td>4,161</td>
<td>2,011</td>
<td></td>
</tr>
<tr>
<td>1,460,964</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>944,745</td>
<td>(347,136)</td>
<td></td>
</tr>
<tr>
<td>$ 2,469,866</td>
<td>$ (222,262)</td>
<td></td>
</tr>
</tbody>
</table>

2,109

$ 2,471,977
Statement of Revenues, Expenses, and Changes in Fund Net Position - Proprietary Funds

For the Fiscal Year Ended June 30, 2019  
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Business-type Activities</th>
<th>Virginia Lottery</th>
<th>Virginia College Savings Plan</th>
<th>Unemployment Compensation</th>
<th>Nonmajor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating Revenues</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charges for Sales and Services</td>
<td>$2,293,565</td>
<td>$175,317</td>
<td>$379,007</td>
<td>$1,557,970</td>
</tr>
<tr>
<td>Interest, Dividends, Rents, and Other Investment Income</td>
<td>—</td>
<td>131,119</td>
<td>31,795</td>
<td>3</td>
</tr>
<tr>
<td>Other (Note 29)</td>
<td>—</td>
<td>—</td>
<td>193</td>
<td>21,991</td>
</tr>
<tr>
<td><strong>Total Operating Revenues</strong></td>
<td>$2,293,565</td>
<td>306,436</td>
<td>410,995</td>
<td>1,579,964</td>
</tr>
<tr>
<td><strong>Operating Expenses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of Sales and Services</td>
<td>165,372</td>
<td>—</td>
<td>—</td>
<td>544,849</td>
</tr>
<tr>
<td>Prizes and Claims (Note 31)</td>
<td>1,399,749</td>
<td>—</td>
<td>273,566</td>
<td>476,936</td>
</tr>
<tr>
<td>Tuition Benefits Expense</td>
<td>—</td>
<td>32,089</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Personal Services</td>
<td>30,032</td>
<td>12,370</td>
<td>—</td>
<td>143,839</td>
</tr>
<tr>
<td>Contractual Services</td>
<td>40,921</td>
<td>12,733</td>
<td>—</td>
<td>88,683</td>
</tr>
<tr>
<td>Supplies and Materials</td>
<td>460</td>
<td>62</td>
<td>—</td>
<td>8,405</td>
</tr>
<tr>
<td>Depreciation</td>
<td>3,264</td>
<td>227</td>
<td>—</td>
<td>2,990</td>
</tr>
<tr>
<td>Rent, Insurance, and Other Related Charges</td>
<td>2,561</td>
<td>897</td>
<td>—</td>
<td>38,998</td>
</tr>
<tr>
<td>Interest Expense</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Non-recurring Cost Estimate Payments to Providers</td>
<td>—</td>
<td>2,856</td>
<td>—</td>
<td>42,066</td>
</tr>
<tr>
<td>Other (Note 32)</td>
<td>—</td>
<td>2,856</td>
<td>—</td>
<td>3,405</td>
</tr>
<tr>
<td><strong>Total Operating Expenses</strong></td>
<td>1,642,359</td>
<td>61,234</td>
<td>273,566</td>
<td>1,350,171</td>
</tr>
<tr>
<td><strong>Operating Income</strong></td>
<td>651,206</td>
<td>245,202</td>
<td>137,429</td>
<td>229,793</td>
</tr>
<tr>
<td><strong>Nonoperating Revenues (Expenses)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest, Dividends, Rents, and Other Investment Income</td>
<td>2,173</td>
<td>8</td>
<td>—</td>
<td>4,178</td>
</tr>
<tr>
<td>Other (Note 33)</td>
<td>82</td>
<td>(34)</td>
<td>—</td>
<td>8,691</td>
</tr>
<tr>
<td><strong>Total Nonoperating Revenues (Expenses)</strong></td>
<td>2,255</td>
<td>(26)</td>
<td>—</td>
<td>12,869</td>
</tr>
<tr>
<td><strong>Income Before Transfers</strong></td>
<td>653,461</td>
<td>245,176</td>
<td>137,429</td>
<td>242,662</td>
</tr>
<tr>
<td>Transfers In (Note 34)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>121</td>
</tr>
<tr>
<td>Transfers Out (Note 34)</td>
<td>(651,659)</td>
<td>(381)</td>
<td>(1,480)</td>
<td>(221,997)</td>
</tr>
<tr>
<td>Change in Net Position</td>
<td>1,802</td>
<td>244,795</td>
<td>135,949</td>
<td>20,786</td>
</tr>
<tr>
<td><strong>Total Net Position (Deficit), July 1</strong></td>
<td>(34,048)</td>
<td>784,569</td>
<td>1,345,015</td>
<td>(29,000)</td>
</tr>
<tr>
<td><strong>Total Net Position (Deficit), June 30 (Note 4)</strong></td>
<td>$ (32,246)</td>
<td>$1,029,364</td>
<td>$1,480,964</td>
<td>$(8,214)</td>
</tr>
</tbody>
</table>

Some amounts reported for business-type activities in the Statement of Activities are different because the net revenue (expense) of certain internal service funds is reported with business-type activities.

Change in Net Position of business-type activities

The accompanying notes are an integral part of this financial statement.
<table>
<thead>
<tr>
<th></th>
<th>Governmental Activities</th>
<th>Internal Service Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>$ 4,405,859</td>
<td>$ 2,429,579</td>
</tr>
<tr>
<td>162,917</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>22,184</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>4,590,960</td>
<td>2,429,579</td>
<td></td>
</tr>
<tr>
<td>710,221</td>
<td>59,207</td>
<td></td>
</tr>
<tr>
<td>2,150,251</td>
<td>1,472,386</td>
<td></td>
</tr>
<tr>
<td>32,089</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>186,241</td>
<td>54,709</td>
<td></td>
</tr>
<tr>
<td>142,337</td>
<td>502,761</td>
<td></td>
</tr>
<tr>
<td>8,927</td>
<td>8,509</td>
<td></td>
</tr>
<tr>
<td>6,481</td>
<td>25,273</td>
<td></td>
</tr>
<tr>
<td>42,456</td>
<td>98,340</td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>42,066</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>6,261</td>
<td>10,835</td>
<td></td>
</tr>
<tr>
<td>3,327,330</td>
<td>2,232,064</td>
<td></td>
</tr>
<tr>
<td>1,263,630</td>
<td>197,515</td>
<td></td>
</tr>
<tr>
<td>6,359</td>
<td>16,167</td>
<td></td>
</tr>
<tr>
<td>8,739</td>
<td>(1,523)</td>
<td></td>
</tr>
<tr>
<td>15,098</td>
<td>14,644</td>
<td></td>
</tr>
<tr>
<td>1,278,728</td>
<td>212,159</td>
<td></td>
</tr>
<tr>
<td>121</td>
<td>388</td>
<td></td>
</tr>
<tr>
<td>(875,517)</td>
<td>(7,630)</td>
<td></td>
</tr>
<tr>
<td>403,332</td>
<td>204,917</td>
<td></td>
</tr>
<tr>
<td>2,066,536</td>
<td>(427,179)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$ 2,469,868</td>
<td>$ (222,262)</td>
</tr>
<tr>
<td>$ 405,499</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2,167

Commonwealth of Virginia 57
## Statement of Cash Flows - Proprietary Funds

For the Fiscal Year Ended June 30, 2019  
(Dollars in Thousands)

### Business-type Activities

<table>
<thead>
<tr>
<th>Enterprise Funds</th>
<th>Virginia Lottery</th>
<th>Virginia College Savings Plan</th>
<th>Unemployment Compensation</th>
<th>Nonmajor</th>
</tr>
</thead>
</table>

### Cash Flows from Operating Activities

<table>
<thead>
<tr>
<th>Receipts for Sales and Services</th>
<th>$ 2,290,189</th>
<th>$ 158,738</th>
<th>$ 394,345</th>
<th>$ 1,661,565</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receipts from Investments</td>
<td></td>
<td></td>
<td>31,827</td>
<td></td>
</tr>
<tr>
<td>Internal Activity-Receipts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payments to Suppliers</td>
<td>(164,581)</td>
<td>(665)</td>
<td></td>
<td>(609,679)</td>
</tr>
<tr>
<td>Payments for Contractual Services</td>
<td>(34,811)</td>
<td>(12,616)</td>
<td></td>
<td>(86,219)</td>
</tr>
<tr>
<td>Payments for Prizes</td>
<td>(1,418,938)</td>
<td></td>
<td>(282,473)</td>
<td>(471,856)</td>
</tr>
<tr>
<td>Internal Activity-Payments</td>
<td></td>
<td>(243)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payments for Tuition Benefits</td>
<td>(31,806)</td>
<td>(12,650)</td>
<td></td>
<td>(150,264)</td>
</tr>
<tr>
<td>Other Operating Revenues</td>
<td></td>
<td></td>
<td>152</td>
<td></td>
</tr>
<tr>
<td>Other Operating Expenses</td>
<td></td>
<td>(177,248)</td>
<td></td>
<td>(2,265)</td>
</tr>
</tbody>
</table>

#### Net Cash Provided by (Used for) Operating Activities

<table>
<thead>
<tr>
<th>Virginity Lottery</th>
<th>$ 639,953</th>
<th>(46,869)</th>
<th>146,805</th>
<th>211,537</th>
</tr>
</thead>
</table>

### Cash Flows from Noncapital Financing Activities

| Transfers In from Other Funds |             |          | 121      |
| Transfers Out to Other Funds  | (634,354)   | (381)    | (1,293)  | (474,662)|
| Other Noncapital Receipts     | 399         |          | 5        | 306,527 |
| Other Noncapital Disbursement Activities |          |          |          | (40,469) |

#### Net Cash Provided by (Used for) Noncapital Financing Activities

<table>
<thead>
<tr>
<th>Virignity Lottery</th>
<th>(633,955)</th>
<th>(381)</th>
<th>(1,288)</th>
<th>(208,483)</th>
</tr>
</thead>
</table>

### Cash Flows from Capital and Related Financing Activities

| Acquisition of Capital Assets | (2,135)   | (535)    |          | (9,584) |
| Payment of Principal and Interest on Bonds and Notes |          |          |          | (62)    |
| Proceeds from Sale of Capital Assets | 7         |          |          |         |

#### Net Cash Used for Capital and Related Financing Activities

<table>
<thead>
<tr>
<th>Financing Activities</th>
<th>(2,128)</th>
<th>(535)</th>
<th></th>
<th>(9,646)</th>
</tr>
</thead>
</table>

### Cash Flows from Investing Activities

| Purchase of Investments | (2,144) | (857,004) |          |         |
| Proceeds from Sales or Maturities of Investments | 10,755   | 807,441   |          |         |
| Investment Income on Cash, Cash Equivalents, and Investments | 1,856   | 93,504    |          | 3,664   |

#### Net Cash Provided by Investing Activities

| Net Increase (Decrease) in Cash and Cash Equivalents | 14,331   | (3,844)  | 145,517  | (2,924) |

### Cash and Cash Equivalents

| Cash and Cash Equivalents, July 1 | 13,207 | 71,283 | 1,325,536 | 178,154 |
| Cash and Cash Equivalents, June 30 | $ 27,544 | $ 67,439 | $ 1,471,053 | $ 175,226 |

### Reconciliation of Cash and Cash Equivalents

| Per the Statement of Net Position: |
| Cash and Cash Equivalents | $ 87,173 | $ 67,629 | $ 1,471,053 | $ 187,748 |
| Cash and Travel Advances | 1         |          |          | 206    |

#### Less:

| Securities Lending Cash Equivalents | (59,630) | (190)    |          | (12,728) |

#### Cash and Cash Equivalents per the Statement of Cash Flows

| $ 27,544 | $ 67,439 | $ 1,471,053 | $ 175,226 |

The accompanying notes are an integral part of this financial statement.
<table>
<thead>
<tr>
<th>Total</th>
<th>Internal Service Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 4,404,837</td>
<td>$ 866,929</td>
</tr>
<tr>
<td>31,827</td>
<td>—</td>
</tr>
<tr>
<td>12,691</td>
<td>1,515,187</td>
</tr>
<tr>
<td>(3,445)</td>
<td>(13,022)</td>
</tr>
<tr>
<td>(775,025)</td>
<td>(163,550)</td>
</tr>
<tr>
<td>(133,646)</td>
<td>(494,729)</td>
</tr>
<tr>
<td>(2,173,267)</td>
<td>(1,513,333)</td>
</tr>
<tr>
<td>(177,248)</td>
<td>—</td>
</tr>
<tr>
<td>(194,720)</td>
<td>(59,615)</td>
</tr>
<tr>
<td>(41,486)</td>
<td>—</td>
</tr>
<tr>
<td>5,358</td>
<td>—</td>
</tr>
<tr>
<td>(4,450)</td>
<td>(10,011)</td>
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<tr>
<td>951,426</td>
<td>127,856</td>
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<tr>
<td>121</td>
<td>388</td>
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<tr>
<td>(1,110,690)</td>
<td>(7,630)</td>
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<td>306,931</td>
<td>155,943</td>
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<td>(40,469)</td>
<td>(98,201)</td>
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<td>(844,107)</td>
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<tr>
<td>(12,254)</td>
<td>(7,827)</td>
</tr>
<tr>
<td>(62)</td>
<td>(7,766)</td>
</tr>
<tr>
<td>7</td>
<td>2,059</td>
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<tr>
<td>(12,309)</td>
<td>(13,534)</td>
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<tr>
<td>(859,148)</td>
<td>—</td>
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<tr>
<td>818,196</td>
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<tr>
<td>99,024</td>
<td>14,539</td>
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<td>58,072</td>
<td>14,539</td>
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<tr>
<td>153,082</td>
<td>179,361</td>
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<tr>
<td>1,588,180</td>
<td>652,744</td>
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<tr>
<td>$ 1,741,262</td>
<td>$ 832,105</td>
</tr>
<tr>
<td>$ 1,813,603</td>
<td>$ 887,958</td>
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<tr>
<td>207</td>
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<tr>
<td>(72,548)</td>
<td>(55,853)</td>
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<tr>
<td>$ 1,741,262</td>
<td>$ 832,105</td>
</tr>
</tbody>
</table>

Continued on next page
Statement of Cash Flows - Proprietary Funds *(Continued from previous page)*

For the Fiscal Year Ended June 30, 2019

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Business-type Activities</th>
<th>Virginia Lottery</th>
<th>Virginia College Savings Plan</th>
<th>Unemployment Compensation</th>
<th>Nonmajor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise Funds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reconciliation of Operating Income

To Net Cash Provided by (Used for)

Operating Activities:

Operating Income (Loss) $651,206 $245,202 $137,429 $229,793

Adjustments to Reconcile Operating

Income to Net Cash Provided by (Used for) Operating Activities:

Depreciation 3,264 227 — 2,990
Interest, Dividends, Rents, and Other Investment Income (5,109) (131,119) — —
Miscellaneous Nonoperating Income — — — —
Other — (14) — (783)

Change in Assets, Deferred Outflows of Resources, Liabilities, and

Deferred Inflows of Resources

(Increase) Decrease in Accounts Receivable (3,401) (14,620) 8,636 (5,118)
(Increase) Decrease in Due from Other Funds — — 80 (222)
(Increase) Decrease in Due from External Parties (Fiduciary Funds) — — — —
(Increase) Decrease in Due from Component Units — — — —
(Increase) Decrease in Other Assets: Due Within One Year — — — —
(Increase) Decrease in Other Assets: Due in More Than One Year (72) (51) — (412)
(Increase) Decrease in Inventory 690 — — 1,685
(Increase) Decrease in Prepaid Items 731 536 — —
(Increase) Decrease in Deferred Outflows of Resources 199 (133) — (1,839)
Increase (Decrease) in Accounts Payable 6,370 (1,677) (12) (32,110)
Increase (Decrease) in Amounts Due to Other Governments — — (81) 5,493
Increase (Decrease) in Due to Other Funds (4,569) (12) 32 1,204
Increase (Decrease) in Due to External Parties (Fiduciary Funds) 5 4 — (1)
Increase (Decrease) in Interfund Payables: Due Within One Year — — — 5,075
Increase (Decrease) in Unearned Revenue 26 — — 1,027
Increase (Decrease) in Due to Claimants, Participants, Escrows and Providers — (1,407) 721 —
Increase (Decrease) in Other Liabilities (4,032) — — (83)
Increase (Decrease) in Claims Payable: Due Within One Year — — — 6,556
Increase (Decrease) in Claims Payable: Due in More Than One Year — — — 2,338
Increase (Decrease) in Long-term Liabilities: Due Within One Year 310 1,751 — 1,331
Increase (Decrease) in Long-term Liabilities: Due in More Than One Year (7,048) (146,022) — (9,454)
Increase (Decrease) in Deferred Inflows of Resources 1,383 466 — 4,588

Net Cash Provided by (Used for) Operating Activities $639,953 $(46,869) $146,805 $211,537

Noncash Investing, Capital, and Financing Activities:

The following transactions occurred prior to the Statement of Net Position date:

Installment Purchases Used to Finance Capital Assets $ — $ — $ — $570
Change in Fair Value of Investments — 1,367 — —

Accounts Payable Increase (Decrease) related to Capital Assets — — — —

Total Noncash, Investing, Capital, and Financing Activities $ — $1,367 $ — $570

The accompanying notes are an integral part of this financial statement.
<table>
<thead>
<tr>
<th></th>
<th>Governmental Activities</th>
<th>Internal Service Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>$1,263,630</td>
<td>$197,515</td>
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<td></td>
<td>$6,481</td>
<td>25,273</td>
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<tr>
<td></td>
<td>(136,228)</td>
<td>—</td>
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<tr>
<td></td>
<td>—</td>
<td>22</td>
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<tr>
<td></td>
<td>(797)</td>
<td>83</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>(14,503)</td>
<td>(13,172)</td>
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<tr>
<td></td>
<td>(142)</td>
<td>(12,188)</td>
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<td>(15)</td>
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<td></td>
<td>—</td>
<td>844</td>
</tr>
<tr>
<td></td>
<td>(17,070)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(535)</td>
<td>(204)</td>
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<tr>
<td></td>
<td>2,952</td>
<td>(1,643)</td>
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<tr>
<td></td>
<td>(1,773)</td>
<td>(50)</td>
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<tr>
<td></td>
<td>(27,429)</td>
<td>(13,525)</td>
</tr>
<tr>
<td></td>
<td>5,412</td>
<td>(89)</td>
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<tr>
<td></td>
<td>(3,345)</td>
<td>421</td>
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<tr>
<td></td>
<td>8</td>
<td>(26)</td>
</tr>
<tr>
<td></td>
<td>5,075</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>1,053</td>
<td>(6,889)</td>
</tr>
<tr>
<td></td>
<td>(686)</td>
<td>—</td>
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<tr>
<td></td>
<td>(4,115)</td>
<td>(200)</td>
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<td></td>
<td>6,556</td>
<td>12,913</td>
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<td></td>
<td>2,338</td>
<td>(38,959)</td>
</tr>
<tr>
<td></td>
<td>3,392</td>
<td>577</td>
</tr>
<tr>
<td></td>
<td>(162,524)</td>
<td>(6,544)</td>
</tr>
<tr>
<td></td>
<td>6,437</td>
<td>1,396</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$951,426</td>
<td>$127,856</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$570</td>
<td>$6,732</td>
</tr>
<tr>
<td></td>
<td>1,367</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>(568)</td>
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<tr>
<td><strong>Total</strong></td>
<td>$1,937</td>
<td>$6,164</td>
</tr>
</tbody>
</table>
Fiduciary Funds

Private Purpose Trust Funds

Private Purpose Trust Funds are trust arrangements that benefit individuals, private organizations, or other governments.

Pension and Other Employee Benefit Trust Funds

Pension and Other Employee Benefit Trust Funds reflect the activities of the retirement systems and postemployment benefits administered by the Virginia Retirement System or the Department of Human Resource Management.

Investment Trust Funds

Investment Trust Funds reflect the external portion of the Local Government Investment Pool and Local Government Investment Pool Extended Maturity sponsored by the Commonwealth.

Agency Funds

Agency Funds report those funds for which the Commonwealth acts solely in a custodial capacity.

A listing of all Fiduciary Funds is located on pages 262-263 in the Combining and Individual Fund Statements and Schedules section of this report. Combining financial statements for all Fiduciary Funds begin on page 264.
## Statement of Fiduciary Net Position - Fiduciary Funds

### June 30, 2019

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Assets and Deferred Outflows of Resources</th>
<th>Private Purpose Trust Funds</th>
<th>Pension and Other Employee Benefit Trust Funds</th>
<th>Investment Trust Funds</th>
<th>Agency Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and Cash Equivalents (Notes 1 and 8)</td>
<td>$121,234</td>
<td>$452,297</td>
<td>$2,725,874</td>
<td>$364,960</td>
</tr>
<tr>
<td>Investments (Notes 1 and 8):</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Bonds and Mortgage Securities</td>
<td>128,257</td>
<td>21,906,203</td>
<td>108,609</td>
<td></td>
</tr>
<tr>
<td>- Stocks</td>
<td>87,289</td>
<td>24,731,315</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Fixed Income Commingled Funds</td>
<td>815,843</td>
<td>1,342,413</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Index and Pooled Funds</td>
<td>1,908,626</td>
<td>11,069,496</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Real Estate</td>
<td>117,013</td>
<td>9,877,199</td>
<td></td>
<td></td>
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<tr>
<td>- Private Equity</td>
<td></td>
<td>15,083,638</td>
<td></td>
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<tr>
<td>- Mutual and Money Market Funds</td>
<td>752,114</td>
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<td></td>
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<tr>
<td>- Short-term Investments</td>
<td></td>
<td>4,780,395</td>
<td>2,581,874</td>
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<tr>
<td>- Hybrid Defined Contribution Investments</td>
<td></td>
<td>520,517</td>
<td></td>
<td></td>
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<tr>
<td>- Other</td>
<td>1,182,257</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>- Total Investments</td>
<td>4,991,399</td>
<td>89,311,176</td>
<td>2,690,483</td>
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</tr>
<tr>
<td>- Assets Held Pending Distribution (Note 1)</td>
<td>9,875</td>
<td>61,686</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receivables, Net (Notes 1 and 9):</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Accounts</td>
<td>316</td>
<td></td>
<td></td>
<td>61,686</td>
</tr>
<tr>
<td>- Contributions</td>
<td></td>
<td>249,372</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Interest and Dividends</td>
<td>3,935</td>
<td>276,879</td>
<td>9,474</td>
<td></td>
</tr>
<tr>
<td>- Security Transactions</td>
<td></td>
<td>995,875</td>
<td></td>
<td></td>
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<tr>
<td>- Other Receivables</td>
<td>1,122</td>
<td>130,475</td>
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</tr>
<tr>
<td>- Total Receivables</td>
<td>5,373</td>
<td>1,652,201</td>
<td>9,474</td>
<td>61,686</td>
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<tr>
<td>- Due from Other Funds (Note 11)</td>
<td></td>
<td>4,014</td>
<td>10,453</td>
<td></td>
</tr>
<tr>
<td>- Due from Internal Parties (Governmental Funds and Business-type Activities) (Note 11)</td>
<td></td>
<td>30,396</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Due from Component Units (Note 11)</td>
<td></td>
<td>35,547</td>
<td></td>
<td></td>
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<tr>
<td>- Other Assets (Notes 1 and 12)</td>
<td>3</td>
<td></td>
<td></td>
<td>35</td>
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<tr>
<td>- Furniture and Equipment (Note 1)</td>
<td></td>
<td>43,739</td>
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<tr>
<td>- Total Assets</td>
<td>5,127,884</td>
<td>91,529,372</td>
<td>5,436,284</td>
<td>886,125</td>
</tr>
</tbody>
</table>

### Liabilities and Deferred Inflows of Resources

<table>
<thead>
<tr>
<th>Liabilities and Deferred Inflows of Resources</th>
<th>Private Purpose Trust Funds</th>
<th>Pension and Other Employee Benefit Trust Funds</th>
<th>Investment Trust Funds</th>
<th>Agency Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts Payable (Notes 1 and 26)</td>
<td>369</td>
<td>47,040</td>
<td></td>
<td>8,998</td>
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<tr>
<td>Due to Other Funds (Note 11)</td>
<td>—</td>
<td>4,014</td>
<td>10,453</td>
<td></td>
</tr>
<tr>
<td>Due to Internal Parties (Governmental Funds and Business-type Activities) (Note 11)</td>
<td>—</td>
<td>62,265</td>
<td>2</td>
<td>4,016</td>
</tr>
<tr>
<td>Obligations Under Securities Lending (Notes 1 and 8)</td>
<td>391</td>
<td>4,667,848</td>
<td>—</td>
<td>2,403</td>
</tr>
<tr>
<td>Due to Claimants, Participants, Escrows and Providers (Note 1)</td>
<td>6,449</td>
<td>—</td>
<td>—</td>
<td>46,850</td>
</tr>
<tr>
<td>Other Liabilities (Notes 1 and 27)</td>
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<td>201,408</td>
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<td>540,156</td>
</tr>
<tr>
<td>Retirement Benefits Payable</td>
<td>—</td>
<td>423,016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payable for Security Transactions</td>
<td>2,082</td>
<td>3,179,576</td>
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<tr>
<td>Net Pension Liability</td>
<td>66</td>
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<td></td>
<td></td>
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<tr>
<td>Net Other Postemployment Benefit Liability</td>
<td>12</td>
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<tr>
<td>Total Other Postemployment Benefit Liability</td>
<td>9</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Liabilities</td>
<td>9,381</td>
<td>8,663,158</td>
<td>10,455</td>
<td>886,125</td>
</tr>
</tbody>
</table>

### The accompanying notes are an integral part of this financial statement.
Statement of Changes in Fiduciary Net Position - Fiduciary Funds
For the Fiscal Year Ended June 30, 2019
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Additions:</th>
<th>Private Purpose Trust Funds</th>
<th>Pension and Other Employee Benefit Trust Funds</th>
<th>Investment Trust Funds</th>
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</thead>
<tbody>
<tr>
<td><strong>Investment Income:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest, Dividends, and Other Investment Income</td>
<td>$ 275,237</td>
<td>$ 5,832,684</td>
<td>$ 85,012</td>
</tr>
<tr>
<td>Distributions to Shareholders from Net Investment Income</td>
<td>—</td>
<td>—</td>
<td>(85,012)</td>
</tr>
<tr>
<td><strong>Total Investment Income</strong></td>
<td>275,237</td>
<td>5,832,684</td>
<td>—</td>
</tr>
<tr>
<td>Less Investment Expenses</td>
<td>4,693</td>
<td>588,829</td>
<td>—</td>
</tr>
<tr>
<td><strong>Net Investment Income</strong></td>
<td>270,544</td>
<td>5,243,855</td>
<td>—</td>
</tr>
<tr>
<td><strong>Contributions:</strong></td>
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<tr>
<td>Participants</td>
<td>708,897</td>
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<td>—</td>
</tr>
<tr>
<td>Member</td>
<td>—</td>
<td>1,138,320</td>
<td>—</td>
</tr>
<tr>
<td>Employer</td>
<td>—</td>
<td>2,862,462</td>
<td>—</td>
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<tr>
<td><strong>Total Contributions</strong></td>
<td>708,897</td>
<td>4,000,782</td>
<td>—</td>
</tr>
<tr>
<td>Shares Sold</td>
<td>—</td>
<td>—</td>
<td>7,805,042</td>
</tr>
<tr>
<td>Reinvested Distributions</td>
<td>—</td>
<td>—</td>
<td>84,810</td>
</tr>
<tr>
<td>Other Revenue (Note 29)</td>
<td>173</td>
<td>4,107</td>
<td>—</td>
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<tr>
<td><strong>Total Additions</strong></td>
<td>979,614</td>
<td>9,248,744</td>
<td>7,889,852</td>
</tr>
<tr>
<td><strong>Deductions:</strong></td>
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</tr>
<tr>
<td>Loan Servicing Payments</td>
<td>71</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Educational Expense Benefits</td>
<td>361,582</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Retirement Benefits</td>
<td>—</td>
<td>4,990,801</td>
<td>—</td>
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<tr>
<td>Refunds to Former Members</td>
<td>—</td>
<td>118,059</td>
<td>—</td>
</tr>
<tr>
<td>Retiree Health Insurance Credits</td>
<td>—</td>
<td>168,725</td>
<td>—</td>
</tr>
<tr>
<td>Insurance Premiums and Claims</td>
<td>1</td>
<td>212,733</td>
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</tr>
<tr>
<td>Trust Payments</td>
<td>1,091</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Administrative Expenses</td>
<td>2,580</td>
<td>52,630</td>
<td>—</td>
</tr>
<tr>
<td>Other Expenses (Note 32)</td>
<td>—</td>
<td>11,522</td>
<td>—</td>
</tr>
<tr>
<td>Shares Redeemed</td>
<td>33,243</td>
<td>—</td>
<td>6,545,186</td>
</tr>
<tr>
<td>Long-term Disability Benefits</td>
<td>—</td>
<td>32,931</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total Deductions</strong></td>
<td>398,568</td>
<td>5,587,401</td>
<td>6,545,186</td>
</tr>
<tr>
<td><strong>Net Increase</strong></td>
<td>581,046</td>
<td>3,661,343</td>
<td>1,344,666</td>
</tr>
</tbody>
</table>

The accompanying notes are an integral part of this financial statement.
Component Units

Component Units are organizations that are legally separate from the primary government. Each discrete component unit serves or benefits those outside of the primary government.

The Virginia Housing Development Authority provides investment in and stimulates construction of low to moderate income housing for the citizens of the Commonwealth.

The Virginia Public School Authority provides financing to cities and counties for capital construction of primary and secondary schools.

The Virginia Resources Authority provides financing for the construction of local water supply and wastewater treatment facilities and other local infrastructure projects.

The Virginia College Building Authority provides financing of capital projects and equipment purchases by state-supported colleges and universities.

Nonmajor Component Units include those listed on pages 286-287 in the Combining and Individual Fund Statements and Schedules section of this report.
## Statement of Net Position - Component Units

**June 30, 2019**

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Assets and Deferred Outflows of Resources</th>
<th>Virginia Housing Development Authority</th>
<th>Virginia Public School Authority</th>
<th>Virginia Resources Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and Cash Equivalents (Notes 1 and 8)</td>
<td>$20,754</td>
<td>$26,586</td>
<td>$11,286</td>
</tr>
<tr>
<td>Investments (Notes 1 and 8)</td>
<td>3,004</td>
<td>—</td>
<td>18,659</td>
</tr>
<tr>
<td>Receivables, Net (Notes 1 and 9)</td>
<td>5,674,626</td>
<td>3,351,388</td>
<td>4,342,991</td>
</tr>
<tr>
<td>Contributions Receivable, Net (Notes 1 and 10)</td>
<td>—</td>
<td>—</td>
<td>—</td>
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<tr>
<td>Due from Primary Government (Note 11)</td>
<td>—</td>
<td>—</td>
<td>—</td>
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<tr>
<td>Due from Component Units (Note 11)</td>
<td>—</td>
<td>—</td>
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<tr>
<td>Inventory (Note 1)</td>
<td>—</td>
<td>—</td>
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<tr>
<td>Prepaid Items (Note 1)</td>
<td>1,439</td>
<td>—</td>
<td>45</td>
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<tr>
<td>Other Assets (Notes 1 and 12)</td>
<td>46,667</td>
<td>—</td>
<td>—</td>
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<tr>
<td>Loans Receivable from Primary Government (Notes 1 and 11)</td>
<td>—</td>
<td>189,935</td>
<td>—</td>
</tr>
<tr>
<td>Restricted Cash and Cash Equivalents (Notes 8 and 13)</td>
<td>815,785</td>
<td>166,364</td>
<td>268,077</td>
</tr>
<tr>
<td>Restricted Investments (Notes 8 and 13)</td>
<td>614,508</td>
<td>81,398</td>
<td>613,743</td>
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<tr>
<td>Other Restricted Assets (Note 13)</td>
<td>6,885</td>
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<td>449</td>
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<tr>
<td>Nondepreciable Capital Assets (Notes 1 and 14)</td>
<td>6,199</td>
<td>—</td>
<td>—</td>
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<tr>
<td>Depreciable Capital Assets, Net (Notes 1 and 14)</td>
<td>18,601</td>
<td>—</td>
<td>122</td>
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<tr>
<td>Total Assets</td>
<td>7,208,468</td>
<td>3,815,671</td>
<td>5,255,372</td>
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<tr>
<td><strong>Deferred Outflows of Resources (Notes 1, 15, 16, 17, and 19)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loans Payable to Primary Government (Notes 1 and 11)</td>
<td>815,785</td>
<td>166,364</td>
<td>268,077</td>
</tr>
<tr>
<td>Other Liabilities (Notes 1, 16, and 27)</td>
<td>506,674</td>
<td>53,975</td>
<td>28,012</td>
</tr>
<tr>
<td>Total Liabilities</td>
<td>3,746,800</td>
<td>3,901,144</td>
<td>3,592,146</td>
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<tr>
<td><strong>Deferred Inflows of Resources (Notes 1, 15, 16, 17, 19, and 38)</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Net Investment in Capital Assets</td>
<td>14,637</td>
<td>—</td>
<td>122</td>
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<tr>
<td>Nonexpendable:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expendable:</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Bond Indenture</td>
<td>3,103,521</td>
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<td>Capital Projects/Construction/Capital Acquisition</td>
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<td>1,666,282</td>
<td>—</td>
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<tr>
<td>Debt Service</td>
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<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Gifts and Grants</td>
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<td></td>
<td>—</td>
</tr>
<tr>
<td>Higher Education</td>
<td></td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Net Other Postemployment Benefit - Virginia Sickness and Disability Program</td>
<td>—</td>
<td>—</td>
<td>—</td>
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<tr>
<td>Virginia Pooled Investment Program</td>
<td></td>
<td>—</td>
<td>7,760</td>
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<tr>
<td>Other</td>
<td></td>
<td>—</td>
<td>—</td>
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<tr>
<td>Unrestricted</td>
<td>348,034</td>
<td>7,879</td>
<td>21,567</td>
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<tr>
<td>Total Net Position (Deficit) (Note 4)</td>
<td>$3,466,192</td>
<td>$7,879</td>
<td>$1,695,731</td>
</tr>
</tbody>
</table>

The accompanying notes are an integral part of this financial statement.
<table>
<thead>
<tr>
<th>Virginia College Building Authority</th>
<th>Nonmajor Component Units</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 747</td>
<td>$ 2,938,318</td>
<td>$ 2,997,691</td>
</tr>
<tr>
<td>12,676,606</td>
<td>12,698,269</td>
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</tr>
<tr>
<td>1,793,341</td>
<td>15,186,399</td>
<td></td>
</tr>
<tr>
<td>631,088</td>
<td>631,088</td>
<td></td>
</tr>
<tr>
<td>27,202</td>
<td>30,603</td>
<td></td>
</tr>
<tr>
<td>119,255</td>
<td>119,255</td>
<td></td>
</tr>
<tr>
<td>146,518</td>
<td>146,518</td>
<td></td>
</tr>
<tr>
<td>142,189</td>
<td>143,673</td>
<td></td>
</tr>
<tr>
<td>60,493</td>
<td>107,160</td>
<td></td>
</tr>
<tr>
<td></td>
<td>189,935</td>
<td></td>
</tr>
<tr>
<td>438,137</td>
<td>767,633</td>
<td>2,455,996</td>
</tr>
<tr>
<td>— 6,023,369</td>
<td>7,333,018</td>
<td></td>
</tr>
<tr>
<td>— 372,018</td>
<td>379,352</td>
<td></td>
</tr>
<tr>
<td>— 3,499,332</td>
<td>3,505,531</td>
<td></td>
</tr>
<tr>
<td>— 18,603,845</td>
<td>18,622,568</td>
<td></td>
</tr>
<tr>
<td>466,338</td>
<td>47,801,207</td>
<td>64,547,056</td>
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<tr>
<td>30,321</td>
<td>683,295</td>
<td>855,429</td>
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<td>496,659</td>
<td>48,464,502</td>
<td>65,402,485</td>
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<tr>
<td>14</td>
<td>1,425,086</td>
<td>1,452,233</td>
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<tr>
<td>— 4,383</td>
<td>106,943</td>
<td></td>
</tr>
<tr>
<td>— 31,256</td>
<td>31,256</td>
<td></td>
</tr>
<tr>
<td>117,525</td>
<td>1,730</td>
<td>119,255</td>
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<tr>
<td>— 35,547</td>
<td>35,547</td>
<td></td>
</tr>
<tr>
<td>— 370,886</td>
<td>370,886</td>
<td></td>
</tr>
<tr>
<td>— 67,529</td>
<td>67,529</td>
<td></td>
</tr>
<tr>
<td>93,898</td>
<td>1,384,690</td>
<td>2,067,249</td>
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<tr>
<td>— 4,197</td>
<td>4,197</td>
<td></td>
</tr>
<tr>
<td>— 194,255</td>
<td>194,255</td>
<td></td>
</tr>
<tr>
<td>— 32,999</td>
<td>32,999</td>
<td></td>
</tr>
<tr>
<td>295,885</td>
<td>820,404</td>
<td>1,734,655</td>
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<tr>
<td>4,270,887</td>
<td>14,624,254</td>
<td>18,795,111</td>
</tr>
<tr>
<td>4,778,209</td>
<td>18,997,216</td>
<td>35,015,515</td>
</tr>
<tr>
<td>— 722,577</td>
<td>754,009</td>
<td></td>
</tr>
<tr>
<td>4,778,209</td>
<td>19,719,793</td>
<td>35,769,524</td>
</tr>
<tr>
<td>— 12,042,575</td>
<td>12,057,334</td>
<td></td>
</tr>
<tr>
<td>— 4,408,376</td>
<td>4,408,376</td>
<td></td>
</tr>
<tr>
<td>— 171,291</td>
<td>171,291</td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>3,103,521</td>
<td></td>
</tr>
<tr>
<td>— 195,348</td>
<td>1,861,630</td>
<td></td>
</tr>
<tr>
<td>— 160,936</td>
<td>160,936</td>
<td></td>
</tr>
<tr>
<td>— 135,721</td>
<td>135,721</td>
<td></td>
</tr>
<tr>
<td>318,139</td>
<td>6,388,818</td>
<td>6,706,957</td>
</tr>
<tr>
<td>— 72,053</td>
<td>72,053</td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>7,760</td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>9,107</td>
<td>9,107</td>
</tr>
<tr>
<td>(4,599,689)</td>
<td>5,160,484</td>
<td>938,275</td>
</tr>
<tr>
<td>$ (4,281,550)</td>
<td>$ 28,744,709</td>
<td>$ 29,632,961</td>
</tr>
</tbody>
</table>
## Statement of Activities - Component Units

For the Fiscal Year Ended June 30, 2019

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Program Revenues</th>
<th>Expenses</th>
<th>Charges for Services</th>
<th>Operating Grants and Contributions (Note 1)</th>
<th>Capital Grants and Contributions</th>
<th>Net (Expenses) Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virginia Housing Development Authority</td>
<td>$354,988</td>
<td>$368,588</td>
<td>$113,658</td>
<td>$—</td>
<td>$127,258</td>
</tr>
<tr>
<td>Virginia Public School Authority</td>
<td>127,670</td>
<td>125,391</td>
<td>8,143</td>
<td>$—</td>
<td>5,864</td>
</tr>
<tr>
<td>Virginia Resources Authority</td>
<td>158,302</td>
<td>121,842</td>
<td>26,979</td>
<td>90,044</td>
<td>80,563</td>
</tr>
<tr>
<td>Virginia College Building Authority</td>
<td>727,558</td>
<td>67,414</td>
<td>42,562</td>
<td>3,753</td>
<td>(613,829)</td>
</tr>
<tr>
<td><strong>Total Major Component Units</strong></td>
<td><strong>1,368,518</strong></td>
<td><strong>683,235</strong></td>
<td><strong>191,342</strong></td>
<td><strong>93,797</strong></td>
<td><strong>(400,144)</strong></td>
</tr>
</tbody>
</table>

| Nonmajor Component Units: | | | | | |
| Higher Education | 15,746,120 | 10,902,216 | 2,672,910 | 591,489 | (1,579,505) |
| Other | 1,106,032 | 892,896 | 46,088 | 110,941 | (58,107) |
| **Total Nonmajor Component Units** | **16,854,152** | **11,795,112** | **2,718,998** | **702,430** | **(1,637,612)** |
| **Total Component Units** | **$18,222,670** | **$12,478,347** | **$2,910,340** | **$796,227** | **(2,037,756)** |

The accompanying notes are an integral part of this financial statement.
### General Revenues

<table>
<thead>
<tr>
<th>Operating Appropriations from Primary Government</th>
<th>Unrestricted Grants and Contributions</th>
<th>Investment Earnings</th>
<th>Miscellaneous</th>
<th>Contributions to Permanent and Term Endowments</th>
<th>Change in Net Position</th>
<th>Net Position (Deficit) July 1 as restated (Note 2)</th>
<th>Net Position (Deficit) June 30 (Note 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$</td>
<td>—</td>
<td>$</td>
<td>—</td>
<td>$</td>
<td>—</td>
<td>$ 182,655</td>
<td>$ 3,283,537</td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>11,986</td>
<td>88</td>
<td>—</td>
<td>17,938</td>
<td>(10,059)</td>
<td>7,879</td>
</tr>
<tr>
<td>403,152</td>
<td>—</td>
<td>333</td>
<td>—</td>
<td>—</td>
<td>(210,344)</td>
<td>(4,071,206)</td>
<td>(4,281,550)</td>
</tr>
<tr>
<td>403,152</td>
<td>—</td>
<td>67,716</td>
<td>88</td>
<td>—</td>
<td>70,812</td>
<td>817,440</td>
<td>888,252</td>
</tr>
<tr>
<td>1,942,658</td>
<td>91,777</td>
<td>471,225</td>
<td>155,511</td>
<td>481,118</td>
<td>1,562,784</td>
<td>24,691,781</td>
<td>26,254,565</td>
</tr>
<tr>
<td>123,063</td>
<td>25,127</td>
<td>37,934</td>
<td>12,515</td>
<td>9,910</td>
<td>150,442</td>
<td>2,339,702</td>
<td>2,490,144</td>
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<tr>
<td>2,065,721</td>
<td>116,904</td>
<td>509,159</td>
<td>168,026</td>
<td>491,028</td>
<td>1,713,226</td>
<td>27,031,483</td>
<td>28,744,709</td>
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<tr>
<td>$ 2,468,873</td>
<td>$ 116,904</td>
<td>$ 576,875</td>
<td>$ 168,114</td>
<td>$ 491,028</td>
<td>$ 1,784,038</td>
<td>$ 27,848,923</td>
<td>$ 29,632,961</td>
</tr>
</tbody>
</table>

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1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Basis of Presentation

The accompanying financial statements have been prepared in conformance with accounting principles generally accepted in the United States of America as prescribed by the Governmental Accounting Standards Board (GASB) and the Financial Accounting Standards Board (FASB).

B. Reporting Entity

For financial reporting purposes, the Commonwealth of Virginia's (the Commonwealth's) reporting entity consists of (1) the primary government, (2) component unit organizations for which the primary government is financially accountable or for which the resources of the component unit primarily benefit the primary government (blended component units), and (3) other component unit organizations for which the nature and significance of their relationship with the primary government is such that exclusion would cause the reporting entity’s financial statements to be misleading, and they are financially accountable to the primary government (discrete component units). The funds of all agencies, boards, commissions, foundations, and authorities that have been identified as part of the primary government or a component unit have been included. GASB standards require the inclusion of numerous organizations that raise and hold funds for the direct benefit of the primary government.

Section 2100 of the GASB Codification of Governmental Accounting and Financial Reporting Standards (GASB Codification) describes the criteria for determining which organizations, functions, and activities should be considered part of the Commonwealth for financial reporting purposes. The basic criteria include appointing a voting majority of an organization’s governing body, and the Commonwealth’s ability to impose its will on that organization or the potential for the organization to provide specific financial benefits to, or impose specific financial burdens on, the Commonwealth. Additionally, in instances where the voting majority is not appointed, the above benefit/burden criteria apply. If the organization’s assets are also held for, or can be accessed by, the Commonwealth, the organization is considered part of the reporting entity.

(1) Primary Government – A primary government consists of all the organizations that make up its legal entity. All funds, organizations, institutions, agencies, and departments are, for financial reporting purposes, part of the primary government.

(2) Blended Component Units – Though legally separate entities, these component units are, in substance, part of the primary government’s operations. The blended component units serve or benefit the primary government almost exclusively. Financial information from these units is combined with that of the primary government. The Commonwealth’s blended component units are:

Virginia Public Building Authority (nonmajor governmental fund) – The Authority was created as a body politic and corporate and is fiscally independent. A government instrumentality, the Authority finances the acquisition and construction of buildings for the use of the Commonwealth and other approved purposes. The Governor appoints the 7-member board, and the primary government is able to impose its will on the Authority. The Auditor of Public Accounts audits the Authority, and a separate report is issued from the Department of the Treasury, Post Office Box 1879, Richmond, Virginia 23218-1879.

Hampton Roads Transportation Accountability Commission (nonmajor governmental fund) – The Commission is a political subdivision of the Commonwealth of Virginia, created by the Hampton Roads Transportation Accountability Commission Act. The Commission has a 23-member board comprised primarily of representatives from participating localities in Planning District 23. Its primary function is determining how the Hampton Roads Transportation Fund regional sales and use tax and fuel tax monies will be invested in new construction projects to provide the greatest impact on reducing congestion for the greatest number of citizens residing within Planning District 23. Based on the projects that the Commission is presently funding, all capital assets constructed by the Commission are reported as Commonwealth assets by the Virginia Department of Transportation (VDOT) (part of primary government). Accordingly, while the Commonwealth is not obligated to pay the Commission’s debt, it would be misleading to exclude the Commission from the Commonwealth’s financial statements. The administrative offices of the Commission are located at 723 Woodlake Drive, Chesapeake, VA 23320. The Commission is audited by PB Mares, LLP.

Virginia Alcoholic Beverage Control Authority (nonmajor enterprise fund) – The Authority was created as an independent political subdivision of the Commonwealth, exclusive of the legislative, executive, or judicial branches of state
government. A government instrumentality, the Authority controls the possession, sale, transportation, distribution, and delivery of alcoholic beverages in the Commonwealth. The Governor appoints the 5-member board, and the primary government is able to impose its will on the Authority. Additionally, the Commonwealth receives all net profits. The administrative offices of the Authority are located at 2901 Hermitage Road, Richmond, VA 23220. The Auditor of Public Accounts audits the Authority and a separate report is issued.

(3) Discrete Component Units – Discretely presented component units are reported in a separate column in the government-wide financial statements to emphasize that they are legally separate from the primary government. They are financially accountable to the primary government, or have relationships with the primary government such that exclusion would cause the reporting entity’s financial statements to be misleading. These discrete component units serve or benefit those outside of the primary government.

GASB statements generally require any organization that raises and holds economic resources for the direct benefit of the reporting entity to be reported as a component unit, even if the reporting entity is not financially accountable for the organization. The entities are included in the Commonwealth’s reporting as nonprofit charitable organizations and exist solely to support the Commonwealth’s higher education institutions and certain state agencies. The higher education institution nonprofit organizations are included in the applicable higher education institution’s column in the accompanying financial statements. In all instances where separate disclosure of these nonprofit organizations is required in the accompanying footnotes, the entities’ totals are aggregated and disclosed as “foundations.”

The criteria for reporting certain component units as major component units focuses on the nature and significance of the component unit’s relationship to the primary government versus other component units.

Discretely presented component units are:

Virginia Housing Development Authority (major) – The Authority was created as a public body corporate, a political subdivision of the Commonwealth, and an agency and instrumentality of the Commonwealth to finance capital projects of city and county school boards. The Governor appoints the board members, who serve at his pleasure. Therefore, the primary government is able to impose its will on the Authority. The Auditor of Public Accounts audits the Authority, and a separate report is issued.

Virginia Public School Authority (major) – The Authority was created as a public body corporate, a political subdivision of the Commonwealth to provide financing of infrastructure projects for water supply, wastewater, storm water, solid waste treatment, airports, public safety, brownfields remediation and redevelopment, and recycling. The Governor appoints the 11-member board and the Executive Director of the Authority. The primary government is able to impose its will on the Authority, and there is a financial benefit/burden to the primary government. The Commonwealth does not guarantee any bonds issued by the Authority. The administrative offices of the Authority are located at 1111 East Main Street, Suite 1920, Richmond, Virginia 23219. Clifton Larson Allen, LLP audits the Authority, and a separate report is issued.

The Authority issued bonds through the Virginia Green Communities Program (VGCP), which uses the Commonwealth’s allocation of Qualified Energy Conservation Bonds to provide subsidized financing for energy efficiency, renewable energy, alternative fueling, and other qualified conservation purposes. The Authority is a conduit issuer for public borrowers with a third-party funding source providing financing for eligible projects. The terms of the VGCP bonds stipulate that the Authority does not guarantee repayment of principal and interest to the bondholders. The Authority has elected to show these bonds as liabilities and the associated loans from local borrowers as assets in their separately issued financial statements. Accordingly, the associated assets and liabilities are included in the accompanying financial statements.

Virginia College Building Authority (major) – The Authority was created as a public body corporate, a political subdivision, and an agency and instrumentality of the Commonwealth. The Governor appoints a majority of the board and members serve at his pleasure. Therefore, the primary government is able to impose its will on

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the Authority. The Authority finances certain capital projects and equipment purchases of state-supported colleges and universities. The Auditor of Public Accounts audits the Authority, and a separate report is issued from the Department of the Treasury, Post Office Box 1879, Richmond, Virginia 23218-1879.

Only the activity of the Authority that relates to the financing of capital projects and equipment purchases by state-supported colleges and universities is included in the accompanying financial statements. The state-supported colleges and universities reported revenue from the Authority of $409.6 million as Program Revenue Capital Grants and Contributions for the 21st Century Program and $84.6 million as Program Revenue Operating Grants and Contributions for equipment. The Authority reported Operating Appropriations from Primary Government of approximately $403.2 million. In addition, the Authority reported approximately $30.0 million in payments from the state-supported colleges and universities for 21st Century and Equipment Program debt service costs and approximately $11.0 million in interest on Build America Bonds.

The Authority assists private institutions of higher education in the financing and refinancing of a broad range of facilities. The Authority is authorized to issue obligations and lend the proceeds to private institutions; however, such financings or refinancings are not obligations of the primary government nor the Authority, but are payable solely from the revenues pledged by the respective private institution. This indebtedness, totaling $697.5 million, is not included in the accompanying financial statements.

Higher Education Institutions (nonmajor) – The Commonwealth’s higher education institutions are granted broad corporate powers by state statutes. The Governor appoints the members of each institution’s board of trustees. In addition to the annual appropriations to support the institutions’ operations, the Commonwealth provides funding for, and construction of, major academic plant facilities for the institutions. Institutions reported Operating Appropriations from Primary Government of approximately $1.9 billion. Therefore, there is a financial benefit/burden to the primary government. The higher education institutions are: the University of Virginia, including the University of Virginia Medical Center and the University of Virginia’s College at Wise; Virginia Polytechnic Institute and State University; Virginia Commonwealth University, including the Virginia Commonwealth University Health System Authority; the College of William & Mary, including Richard Bland College and the Virginia Institute of Marine Science; Virginia Military Institute; Virginia State University; Norfolk State University; University of Mary Washington; James Madison University; Radford University; Old Dominion University; George Mason University; Virginia Community College System; Christopher Newport University; and Longwood University. The Southwest Virginia Higher Education Center, Roanoke Higher Education Authority, Institute for Advanced Learning and Research, Southern Virginia Higher Education Center, and New College Institute are also included as higher education institutions. The colleges and universities are funded through state appropriations, tuition, federal grants, and private donations and grants. As previously noted, certain foundations are considered component units of the higher education institutions, and are included in the accompanying financial statements as well as the higher education institutions’ separately issued financial statements. The Auditor of Public Accounts (APA) does not audit the Roanoke Higher Education Authority, the Institute for Advanced Learning and Research, and the component units of the higher education institutions, including foundations, but relies on the reports issued by other auditors to render her opinion.

The APA audits the colleges and universities, and individual reports are issued under separate cover. Complete financial statements for each institution may be obtained from their respective administrative offices. The addresses for these institutions may be obtained from the Department of Accounts, 101 North 14th Street, Richmond, Virginia 23219-3638.

Innovation and Entrepreneurship Investment Authority (nonmajor) – The Authority is granted corporate powers by the Code of Virginia. The Authority serves to facilitate the marketing, organization, and development of scientific research and technology by the state’s institutions of higher education and private industry in the Commonwealth. In addition, the Authority serves to promote the economic development of the Commonwealth by attracting and retaining high technology jobs and businesses in Virginia. The Governor and General Assembly appoint the 17-member board, and there is a financial benefit/burden to the primary government. The Authority’s combined financial statements include the accounts of the Center for Innovative Technology (CIT) and subsidiaries after elimination of all significant intercompany balances and transactions. CIT is a non-stock, not-for-profit corporation, which acts as the operating arm of the Authority. The address for the administrative offices of the Authority is CIT Building, Suite 600, 2214 Rock Hill Road, Herndon, Virginia 20170-4228. The Auditor of Public Accounts audits the Authority, and a separate report is issued.

Virginia Economic Development Partnership (nonmajor) – The Partnership was created as a body corporate and operates to encourage, stimulate, and support the development and expansion of both domestic and international commerce in the Commonwealth. The Governor appoints the 17-member board, and there is a
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Virginia Foundation for Healthy Youth (nonmajor) – The Foundation was created as a body politic and is administratively assigned to the Department of Conservation and Recreation (part of primary government) and charged with promoting preservation through the acceptance of donated conservation easements and raising funds for the purchase of preservation land. The Governor appoints the 7-member board of trustees, and the primary government can impose its will on the Foundation. The administrative offices of the Foundation are located at 900 South Main Street, Blacksburg, Virginia 24060. Hicok, Brown & Company CPAs audits the Foundation, and a separate report is issued.

Virginia Tourism Authority (nonmajor) – The Authority was established as a public body corporate and as a political subdivision of the Commonwealth. The Authority encourages, stimulates, and promotes tourism and film production industries of the Commonwealth. The Governor appoints all of the board members, and there is a financial benefit/burden to the primary government. The administrative offices are located at 901 East Cary Street, Suite 900, Richmond, Virginia 23219. The Auditor of Public Accounts audits the Authority.

Virginia Foundation for Healthy Youth (nonmajor) – The Foundation was created as a body corporate and as a political subdivision of the Commonwealth. The Foundation was established to determine the appropriate recipients of monies in the Tobacco Indemnification and Community Revitalization Fund. This fund is to provide payments to tobacco farmers as compensation for the adverse economic effects resulting from loss of investment in specialized tobacco equipment and barns, as well as lost tobacco production opportunities. It also provides monies to revitalize tobacco dependent communities. The Governor appoints the majority of the board, and there is a financial benefit/burden to the primary government. The administrative offices are located at 701 East Franklin Street, Suite 501, Richmond, Virginia 23219. The Auditor of Public Accounts audits the Commission.

Hampton Roads Sanitation District Commission (nonmajor) – The Commission was established as a political subdivision of the Commonwealth and a government instrumentality. The Commission, which is the governing board of the district, was granted corporate powers by the Code of Virginia. The Governor appoints the Commission members, who serve at his pleasure. Therefore, the primary government is able to impose its will on the Commission. The Commonwealth is not obligated by the debt of the Commission. The Commission was established to benefit the inhabitants of the district and operate a sewage system for 18 localities in the Chesapeake Bay area. The address for the administrative offices of the Commission is 1434 Air Rail Avenue, Virginia Beach, Virginia 23455. Cherry Bekael, LLP audits the Commission, and a separate report is issued.

Virginia Biotechnology Research Partnership Authority (nonmajor) – The Authority is a legally separate, political subdivision of the Commonwealth created by the General Assembly to assist in the development of a biotechnology research park. The Governor appoints the board members of the Authority, and there is a potential financial benefit/burden to the primary government. The administrative offices of the Authority are located at 800 East Leigh Street, Richmond, Virginia 23219. The Auditor of Public Accounts audits the Authority, and a separate report is issued.

The Authority issued Series 2002 and Series 2013 revenue bonds for specific customers. The Series 2002 revenue bonds were for a facility built specifically for the United Network for Organ Sharing. The Series 2013 revenue bonds were to assist the Institute for Transfusion Medicine (ITxM). The bonds are secured by a letter of credit and are payable solely from the payments made by the borrower under the loan agreement. None of these bonds constitutes a debt or pledge of the Commonwealth of Virginia 77
Authority or the Commonwealth. Accordingly, the bonds are not reported as liabilities in the accompanying financial statements.

Virginia Small Business Financing Authority (nonmajor) – Section 2.2-2280 of the Code of Virginia established the Authority as a public body corporate and a political subdivision of the Commonwealth. The Governor appoints the 11-member board, and the primary government is able to impose its will on the Authority. The Authority was created to assist small businesses in the Commonwealth in obtaining financing for new businesses or the expansion of existing businesses. The Authority can provide financial assistance to small businesses by providing loans, guarantees, insurance, and other assistance, thereby encouraging the investment of private capital in small businesses in the Commonwealth. The Authority can loan money to local governments as defined by the Code of Virginia for economic development purposes. The Authority also guarantees loans made to small businesses by banks. The administrative offices of the Authority are located at 101 North 14th Street, 11th Floor, Richmond, Virginia 23218-0446. The Auditor of Public Accounts audits the Authority.

The Authority has issued Industrial Development Revenue Bonds to provide financial assistance to private sector entities for the acquisition and construction of industrial and commercial facilities deemed to be in the public interest. The bonds are secured by the property financed and are payable solely from payments received on the underlying mortgage loans. Upon repayment of the bonds, ownership of the acquired facilities transfers to the private sector entity served by the bond issuance. Neither the Authority nor the Commonwealth is obligated in any manner for repayment of the bonds. Accordingly, the bonds are not reported as liabilities on the accompanying financial statements.

Virginia School for the Deaf and Blind Foundation (nonmajor) – The Foundation operates as a nonprofit educational and fundraising organization solely in connection with, and exclusively for the benefit of, the Virginia School for the Deaf and Blind (part of primary government). The Foundation uses a December 31 calendar year-end. The administrative offices are located at Post Office Box 2069, Staunton, Virginia 24402.

Science Museum of Virginia Foundation (nonmajor) – The Foundation is a non-stock, nonprofit corporation established to implement and fund programs, projects, and operations that are authorized and approved by the trustees of the Science Museum of Virginia (part of primary government). There is a financial benefit/burden relationship to the primary government, and the economic resources of the Foundation are entirely for the direct benefit of the Commonwealth and its citizens. The administrative offices of the Foundation are located at 2500 West Broad Street, Richmond, Virginia, 23220. Keiter, CPAs, audits the Foundation, and a separate report is issued.

Virginia Commercial Space Flight Authority (nonmajor) – The Authority is a legally separate political subdivision of the Commonwealth created by the General Assembly to facilitate and coordinate scientific and technological research and development and to promote the industrial and economic development of the Commonwealth. The Governor appoints the 9-member board, and there is a potential financial benefit/burden to the primary government. The Commonwealth approved the conversion of a $5.0 million interest-free note to repair Pad 0A into a grant in March 2015. During fiscal year 2018, the Authority received $20.0 million appropriated by the Commonwealth for the construction of Mid-Atlantic Regional Spaceport Facilities. The Commonwealth plans to transfer $15.8 million to the Authority annually through fiscal year 2024. The administrative offices of the Authority are located at 4111 Monarch Way, Suite 303, Norfolk, Virginia 23508. Brown Edwards & Company, LLP, audits the Authority, and a separate report is issued.

Danville Science Center, Inc. (nonmajor) – The Center is a nonprofit corporation formed for the purpose of implementing and funding those programs, projects and operations which are authorized and approved by the trustees of the Science Museum of Virginia (part of primary government). There is a financial benefit/burden to the primary government, and the economic resources of the Center are entirely for the direct benefit of the Commonwealth and its citizens. The administrative offices of the Center are located at 677 Craghead Street, Danville, Virginia 24541. Harris, Harvey, Neal & Company, LLP, audits the Center, and a separate report is issued.

Virginia Museum of Fine Arts Foundation (nonmajor) – The Foundation operates as a nonprofit corporation under the laws of Virginia to fund exhibitions, programs, and capital asset expansion to ensure that the Virginia Museum of Fine Arts (part of primary government) has the space and resources for art to help improve the quality of life for many. There is a financial benefit/burden to the primary government, and the economic resources of the Foundation are entirely for the direct benefit of the Commonwealth and its citizens. The administrative offices of the Foundation are located at 200 Arthur Ashe Boulevard, Richmond, Virginia 23220. Dixon Hughes Goodman, LLP, audits the Foundation, and a separate report is issued.

A. L. Philpott Manufacturing Extension Partnership (nonmajor) – The Partnership has the mission to foster economic growth by enhancing the competitiveness of Virginia’s manufacturers.
The Partnership provides manufacturing firms with fee-based technology consulting services, access to business modernization resources, and support for interfirm collaboration. Further, the Partnership provides direct assistance to increase sales, decrease costs, and improve quality, productivity, and competitiveness. The Partnership has a 23-member board of trustees currently serving. The board consists of the presidents of two public four-year institutions of higher education; three community college presidents; one president of a private four-year institution of higher education; the director of Virginia’s Center for Innovative Technology; Virginia’s Secretary of Commerce and Trade; and 15 citizen members, representing manufacturing industries, appointed by the Governor. There is also a financial benefit/burden to the primary government. The administrative office is located at 32 Bridge Street South, Suite 200B, Martinsville, Virginia 24112-6216. The Auditor of Public Accounts audits the Partnership.

Fort Monroe Authority (nonmajor) – The Authority is a legally separate, political subdivision of the Commonwealth created by the General Assembly to assist in formulating a reuse plan for Fort Monroe. The Governor appoints a majority of the 14-member board, and there is a potential financial benefit/burden to the primary government. The administrative offices of the Authority are located at 20 Ingalls Road, Fort Monroe, Virginia 23651. Brown Edwards audits the Authority, and a separate report is issued.

Assistive Technology Loan Fund Authority (nonmajor) – The Authority was created as a political subdivision and public body corporate by the Code of Virginia. The Governor appoints the board of directors as directed by the Code and the primary government is able to impose its will on the Authority. The Authority manages a fund to provide loans to individuals to acquire assistive technology, other equipment, or other authorized purposes designed to help disabled individuals become more independent. The administrative offices are located at 1602 Rolling Hills Drive, Suite 107, Richmond, Virginia 23229. The Auditor of Public Accounts audits the Authority.

Virginia Land Conservation Foundation (nonmajor) – The Foundation was created as a body politic and corporate to serve the Department of Conservation and Recreation (DCR) (part of primary government) by acquiring interests in preservation land and providing grants to other entities to acquire interests in preservation land. The Governor appoints the 19-member board, and the primary government can impose its will on the Foundation. The administrative offices of the Foundation are located at 600 East Main Street, 24th Floor, Richmond, Virginia 23219. The Auditor of Public Accounts audits the Foundation as part of DCR.

Virginia Arts Foundation (nonmajor) – The Foundation was created as a body politic and corporate to serve the Virginia Commission for the Arts (part of primary government) by promoting the arts in the Commonwealth. The Governor appoints the board of trustees for the Virginia Commission for the Arts, which also serves as the board for the Virginia Arts Foundation. The Director of the Virginia Commission for the Arts serves as the board chairman. In addition, the primary government can impose its will on the Foundation. The administrative offices of the Foundation are located at 600 East Main Street, Suite 330, Richmond, Virginia 23219. The Auditor of Public Accounts audits the Foundation as part of the Virginia Commission for the Arts.

Library of Virginia Foundation (nonmajor) – The Foundation was created as a private, nonprofit 501(c)(3) corporation supporting the Library of Virginia (part of primary government). The Foundation was established upon receipt of a major bequest. The articles of incorporation stipulate that the Foundation shall at all times be operated solely in connection with, and exclusively for the benefit of, the Library of Virginia. The Foundation is governed by a separate board of directors, and promotes and supports the Library of Virginia in all activities. The administrative offices of the Foundation are located at 800 East Broad Street, Richmond, Virginia 23219. Frank Barcalow CPA, PLLC, audits the Foundation, and a separate report is issued.

Virginia Health Workforce Development Authority (nonmajor) – The Authority is a legally separate public body corporate and a political subdivision of the Commonwealth created by the General Assembly. The Authority facilitates the development of a statewide health professions pipeline. The Governor appoints a majority of the board members, and the primary government is able to impose its will on the Authority. The administrative offices of the Authority are located at 3831 Westerre Parkway, Suite 2, Henrico, Virginia 23233. The Auditor of Public Accounts audits the Authority.

(4) Related Organizations – Organizations for which the primary government appoints a majority of the board, but is not financially accountable, are related organizations. Related organizations are:

Tobacco Settlement Financing Corporation – The Corporation was created by the Tobacco Settlement Financing Corporation Act, Chapters 482 and 488 of the Acts of the General Assembly during the 2002 General Assembly Session. The Corporation is a public body corporate entity and an independent instrumentality of the Commonwealth, managed by a 6-member board, including the State Treasurer. The Corporation purchased all of the future tobacco settlement revenue allocated to the Tobacco Region Revitalization Commission (nonmajor component
unit). Neither the Commonwealth’s nor the Virginia Foundation for Healthy Youth’s (nonmajor component unit) tobacco revenue was securitized. The administrative offices of the Corporation are located at 101 North 14th Street, 3rd Floor, Post Office Box 1879, Richmond, Virginia 23218-1879. Clifton Larson Allen, LLP, audits the Corporation, and a separate report is issued.

**Virginia Recreational Facilities Authority** – The Authority was created as a political subdivision and instrumentality of the Commonwealth and given separate corporate powers by the *Code of Virginia*. The Governor appoints 13 members of the board of directors to serve alongside two members of the Senate and four members of the House of Delegates. The Authority operates educational programs, tourism, and commerce in the Roanoke Valley. The address for the administrative offices of the Authority is 5204 Bernard Drive Southwest, Post Office Box 29800, Roanoke, Virginia 24018. Robinson, Farmer, Cox Associates audits the Authority, and a separate report is issued.

**Jamestown-Yorktown Educational Trust** – The Trust was created as a nonprofit corporation by the *Code of Virginia* to assist the Jamestown-Yorktown Foundation (Foundation). The Trust board consists of six members selected from the Foundation’s board of trustees. Several Commonwealth officials serve as ex-officio members of the Foundation’s board, and the Governor appoints 12 members. The Trust operates the Jamestown Settlement and Yorktown Victory Centers’ gift shops and café. The address for the administrative offices of the Trust is Post Office Box 3605, Williamsburg, Virginia 23187. Keiter Certified Public Accountants audits the Trust, and a separate report is issued.

**Virginia Birth-Related Neurological Injury Compensation Program** – The Program was created to provide a no-fault alternative for birth-related neurological injuries. The Governor appoints the 9-member board. The administrative offices of the Program are located at 7501 Boulders View Drive, Suite 210, Richmond, Virginia 23225. KPMG, LLP, audits the Program, and a separate report is issued.

**Chesapeake Bay Bridge and Tunnel Commission** – The Commission was created to establish policy and administer operations of the Chesapeake Bay Bridge Tunnel District. Any of the 11 members of the Commission appointed or reappointed on or after July 1, 1998, shall be appointed by the Governor, subject to confirmation by each house of the General Assembly. The administrative offices of the Commission are located at 32386 Lankford Highway, Cape Charles, Virginia 23310. KPMG, LLP, audits the Commission, and a separate report is issued.

C. **Government-wide and Fund Financial Statements**

The government-wide financial statements, the Statement of Net Position and the Statement of Activities, report information on all nonfiduciary activities of the primary government and component units. For the most part, the effect of interfund activity has been removed from these statements. Governmental activities, which are normally supported by taxes and intergovernmental revenues, are reported separately from business-type activities, which rely to a significant extent on fees and charges for support. Also, the primary government activity is reported separately from the legally separate component units for which the Commonwealth is financially accountable.

The Statement of Activities demonstrates the degree to which direct expenses of a specific function or segment are offset by program revenues. Direct expenses are those that are clearly identifiable with a specific function, segment, or component unit. In addition, to the extent that indirect costs are allocated to the various functions, the program expenses will include both direct and indirect costs. Program revenues include charges to customers who purchase, use, or directly benefit from goods or services provided by a given function, segment, or component unit, as well as investment income generated by operations. Program revenues also include grants, contributions, and investment income that are restricted to meeting the operational or capital requirements of a particular function, segment, or component unit. Taxes and other items properly excluded from program revenues are reported as general revenues.

Fund equity is restricted when constraints are placed on them that are imposed by external parties or constitutional provisions. When both restricted and unrestricted resources are available for use, the Commonwealth’s policy is to use the restricted resources first. Some component units may follow a different policy. When committed, assigned, and unassigned resources are available for use, the Commonwealth’s policy is to use the committed resources first, assigned resources next, and unassigned resources last.

Separate financial statements are provided for governmental funds, proprietary funds, fiduciary funds, and component units. However, fiduciary funds are not included in the government-wide statements. Major governmental funds, enterprise funds, and component units are reported in separate columns in the fund financial statements, with nonmajor funds being aggregated into a single column.

D. **Measurement Focus, Basis of Accounting, and Financial Statement Presentation**

**Government-wide Financial Statements** – The government-wide financial statements are reported using the economic resources measurement focus and the full accrual basis of accounting. Revenues are recorded when earned and expenses are recognized.
when a liability is incurred, regardless of the timing of related cash flows. Grants and similar items are recognized as revenue as soon as all eligibility requirements imposed by the provider have been met.

**Governmental Fund Financial Statements** – The governmental fund financial statements are reported using the current financial resources measurement focus and the modified accrual basis of accounting. Revenues are recognized as soon as they are both measurable and available. Revenues are considered to be available when they are collectible within the current period or soon enough thereafter to pay liabilities of the current period. For this purpose, the primary government considers revenues to be available if they are collected within 60 days of the end of the current fiscal year (or one year for Medicaid). Significant revenues subject to accrual include federal grants and income and sales taxes. Income tax revenues for tax underpayments are only recognized to the extent of the primary government’s estimated refunds for tax overpayments received. Revenues that the primary government earns by incurring obligations are recognized in the same period as when the obligations are recognized.

Expenditures generally are recorded when a liability is incurred, as under full accrual accounting. However, expenditures related to debt service, compensated absences, and claims and judgments are recorded only when the payment is due.

The primary government reports the following major governmental funds:

**General Fund** – Accounts for the transactions related to resources received and used for those services traditionally provided by a state government, and which are not accounted for in any other fund. These services include general government, legislative and judicial activities, public safety, health and behavioral health programs, resources and economic development, licensing and regulation, and primary and secondary education.

**Commonwealth Transportation Special Revenue Fund** – Accounts for the revenues and expenditures associated with highway operations, maintenance, construction, and other transportation related activities. Funding for these programs is received from highway user taxes, fees, and funds received from the federal government.

**Federal Trust Special Revenue Fund** – Accounts for all federal dollars received by the Commonwealth except those received by the Commonwealth Transportation Fund, the Unemployment Compensation Fund, certain Medicaid reimbursements recorded in the General Fund, the Grant Anticipation Revenue Notes and Build America Bond Subsidies reported in the Debt Service Fund, and component units.

**Literary Fund Special Revenue Fund** – Accounts for revenues from fines, forfeitures, and proceeds from unclaimed property used primarily to support public education in the Commonwealth. This fund provides low interest loans to school divisions for construction, renovations, and expansion of school buildings.

**Proprietary Funds, Fiduciary Funds, and Component Units Financial Statements** – The financial statements of the proprietary funds, fiduciary funds, and component units are reported using the economic resources measurement focus and the full accrual basis of accounting. As with the government-wide statements, revenues are recorded when earned and expenses are recognized when a liability is incurred, regardless of the timing of related cash flows. Grants and similar items are recognized as revenue as soon as all eligibility requirements imposed by the provider have been met. Agency funds have no measurement focus since they only report assets and liabilities.

Proprietary funds distinguish operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund’s principal ongoing operations. Revenues and expenses not meeting this definition are reported as nonoperating.

Foundations’ (component units) financial statements are prepared using the economic resources measurement focus and the full accrual basis of accounting. The financial statements are prepared under FASB rather than GASB standards. In some instances, activities of the foundations (component units) are reported separately within the footnotes because of the different reporting standards. Also, some foundations (component units) have a December 31st or March 31st year-end rather than a fiscal year-end. Foundations (component units) with different year-ends are included in these financial statements for the year ending August 31, 2018, December 31, 2018, or March 31, 2019. Significant intrafund activity/balances between each higher education institution and their foundations have been eliminated.

The following amounts could not be eliminated due to the differing year-ends:

- **University of Virginia (nonmajor component unit):**
  - Institution revenue of $29.1 million
  - Foundation assets of $1.7 million
  - Foundation liabilities of $349,054
  - Foundation expenses of $27.5 million

- **Old Dominion University (nonmajor component unit):**
  - Institution liabilities of $51.6 million
  - Foundation assets of $42.7 million
The primary government reports the following major enterprise funds:

- **Virginia Lottery Fund** – Accounts for all receipts and expenses of the Virginia Lottery.
- **Virginia College Savings Plan Fund** – Administers the Prepaid529 Program.
- **Unemployment Compensation Fund** – Accounts for receipts from employers and expenses incurred to provide benefits to eligible unemployed workers.

Additionally, the primary government reports the following fund types:

### Governmental Fund Types:

- **Special Revenue Funds** – Account for transactions related to resources received and used for restricted, committed, or specific purposes.
- **Debt Service Funds** – Account for transactions related to resources retained and used for the payment of interest and principal on long-term obligations. Additionally, this fund includes the activity of the Hampton Roads Transportation Accountability Commission (blended component unit).
- **Capital Project Funds** – Account for transactions related to resources received and used for the acquisition, construction, or improvement of capital facilities not reported in the other governmental or proprietary funds with the exception of certain VPBA disbursements. The primary resource for these funds is the proceeds of bond issues and energy performance contracts. Principal uses are for construction and improvement of state office buildings, correctional and behavioral health facilities, and parks. Additionally, this fund includes the activity of the Hampton Roads Transportation Accountability Commission (blended component unit) for construction projects related to new or existing highways, bridges or tunnels in the localities comprising Planning District 23.
- **Permanent Funds** – Account for transactions of the Commonwealth Health Research Fund and the Behavioral Health Endowment Funds whose principal must remain intact and whose income is used to benefit the Commonwealth’s citizens and behavioral health patients.

### Proprietary Fund Types:

- **Enterprise Funds** – Account for transactions related to resources received and used for financing self-supporting activities of the primary government that offer products and services on a user-charge basis to external users.
- **Internal Service Funds** – Account for transactions related to the financing and sale of goods or services provided by the agencies of the primary government to other agencies and institutions of the Commonwealth. Activities include the provision of information technology, manufacturing activities, insurance programs, fleet services, facilities and property management, engineering and payroll services.

### Fiduciary Fund Types:

- **Private Purpose Trust Funds** – Account for transactions of all other trust arrangements in which the principal and income benefit individuals, private organizations, or other governments. These trusts include those for the Commonwealth-sponsored educational savings plan and other purposes.
- **Pension and Other Employee Benefit Trust Funds** – Account for transactions of the Commonwealth administered retirement systems and other employment benefits.
- **Investment Trust Funds** – Account for the external portion of the Local Government Investment Pool (LGIP) and the LGIP Extended Maturity that is sponsored by the Commonwealth.
- **Agency Funds** – Account for amounts held in trust by the primary government for others. Agency funds include those funds established to account for the collection of taxes and fees for distribution to localities and other states, employee benefits, deposits of insurance carriers, child support collections and other miscellaneous accounts.

### E. Budgetary Process

Budgetary amounts shown in the Required Supplementary Information and Combining and Individual Fund Statements and Schedules sections represent the total of the original budgeted amounts and all supplemental appropriations. The Commonwealth’s budget is prepared principally on a cash basis and represents appropriations as authorized by the General Assembly. Unexpended appropriations at the end of the fiscal year generally lapse. However, they may be reappropriated for expenditure in the following fiscal year. The Governor, as required by the Code of Virginia, submits a budget composed of all proposed expenditures for the Commonwealth, and of estimated revenues and borrowing for a biennium, to the General Assembly. Budgets are adopted for the General and Special Revenue Funds, except for the Literary (major special revenue) and Unclaimed Property (nonmajor special revenue) Funds. Formal budgetary integration is not employed for the Capital Projects (nonmajor governmental), Debt Service (nonmajor governmental), Permanent (nonmajor governmental), Literary (major special revenue) and Unclaimed Property (nonmajor special revenue) Funds because effective budgetary control is alternatively achieved.
through the General Fund and the remaining special revenue funds.

The budget is prepared on a biennial basis; however, the budgets of the General and Special Revenue Funds contain separate appropriations for each year within the biennial budget, as approved by the General Assembly and signed into law by the Governor. For management control purposes, the lowest level of budgetary control is the program level. The Governor may transfer an appropriation within a state agency or from one state agency to another, provided that total fund appropriations, as contained within the budget, are not exceeded without further General Assembly action. Additionally, the Governor may reduce appropriations up to 15.0 percent without further General Assembly action. Increases in General Fund appropriations must be approved by the General Assembly.

Appropriations for programs funded from Special Revenue Funds may allow expenditures in excess of the original appropriations to the extent that revenues of the funds exceed original budget estimates and such additional expenditures are approved by the Governor through supplemental appropriations.

F. Cash, Cash Equivalents, Investments, and Derivatives

Cash

In order to maximize the Commonwealth's earning potential, the majority of the primary government's cash balances are pooled together in the general account for investment purposes. The amounts required for operations are liquidated as needed. Since all amounts not required for operations are held in investment securities, it is possible that the cash balances could be negative due to timing differences in liquidating the investments.

As of June 30, 2019, the General Fund had a negative cash balance of $6.2 billion. In order to properly reflect the general account position, this negative cash balance has been eliminated in the accompanying statements and offset against the primary government's cash equivalents and investments (see Note 8).

Cash Equivalents

Cash equivalents are investments with an original maturity of 90 days or less.

Investments

Investments are principally comprised of monies held by component units, Pension and Other Employee Benefit Trust Funds, and monies held by the State Treasurer in both the general account and other fiduciary accounts.

The primary government's policy for managing interest rate risk, with the exception of the Virginia College Savings Plan (Virginia529) and the Virginia Retirement System (the System), uses the segmented time distribution method.

Virginia529, for its investment portfolio reported as Prepaid529 (major enterprise fund) and Invest529 (private purpose trust fund), and the System, for its investment portfolio reported as Pension and Other Employee Benefit Trust Funds, manage the interest rate risk using the effective duration methodology. To be consistent with management practices for each portfolio, the Commonwealth has elected to disclose the interest rate risk exposures, using the segmented time distribution for the primary government (excluding Prepaid529, Invest529, and Pension and Other Employee Benefit Trust Funds) and the effective duration method for Prepaid529, Invest529, and the Pension and Other Employee Benefit Trust Funds. The Commonwealth discloses the component unit's interest rate risk using the segmented time distribution method (see Note 8).

Governmental and proprietary funds, both primary government and component units, report investments in money market and in the Commonwealth sponsored investment pools at amortized cost which approximates fair value. All other investments, including investments in the Commonwealth sponsored Extended Maturity portfolio, are reported at fair value, in accordance with GASB Statement No. 31, Accounting and Financial Reporting for Certain Investments and for External Investment Pools, as amended by GASB Statement No. 72, Fair Value Measurement and Application. GASB Statement No. 72 provides guidance for determining fair value measurements using the level of fair value hierarchy and valuation techniques (see Note 8).

Investments administered by the System are reported at fair value, except for certain cash equivalents and other short-term, highly liquid investments are reported at amortized cost. The cost of investments sold is the average cost of the aggregate holding of the specific investment sold. Investments in affiliated organizations are accounted for on the equity method of accounting and the System's share of their earnings (losses) for the period is included in investment income using the equity method.

Derivatives

Derivative instruments are financial contracts whose values depend on the values of one or more underlying assets, reference rates, or financial indexes (see Note 16).
G. Assets Held Pending Distribution

Assets held pending distribution include various assets that have been placed in safekeeping until final disposition has been determined.

H. Receivables

Receivables in the governmental funds consist primarily of the accrual of taxes, as well as receivables of the primary government's Medicaid program. Additionally, receivables include amounts to be received for debt service payments related to certain bonds. Receivables in the proprietary funds consist primarily of tuition contribution receivables and unemployment compensation. Receivables of fiduciary funds are primarily the accrual of security transactions in the Pension and Other Employee Benefit Trust Funds. Receivables of the component units consist primarily of mortgage receivables, loans receivable, local school bonds receivable, patient receivables, and student receivables. Receivables are recorded net of allowances for doubtful accounts (see Note 9).

I. Contributions Receivable, Net

Contributions Receivable reported by the foundations (component units) represents pledges or unconditional promises to give that have been discounted (see Note 10).

J. Internal Balances

Interfund receivables and payables have been eliminated from the Statement of Net Position, except for the residual amounts due between governmental and business-type activities (see Note 11).

K. Inventory

Inventories consist of materials and supplies and are reported as expenditures when consumed. These assets are classified as nonspendable fund balance. Inventories exceeding $1.0 million of the General and the Special Revenue Funds are maintained at cost using the first-in, first-out (FIFO) methodology, except for the following:

- Department of Health (VDH)
- Department of State Police (VSP)
- Virginia Department of Transportation (VDOT)

VDH supply inventories are recorded in the General (major), Federal Trust (major special revenue), and Health and Social Services (nonmajor special revenue) Funds using the FIFO methodology and are maintained at either cost or current market cost. VSP inventories are recorded in the General (major) and Other (nonmajor special revenue) Funds using the average cost methodology and are maintained at cost. VDOT inventories are recorded in the Commonwealth Transportation Fund (major special revenue) using the FIFO and average cost methodologies and are maintained at either cost or average cost.

In addition to inventories maintained as stated above, the following agencies reported donated inventory balances on hand as of June 30, 2019:

- Department of Behavioral Health and Developmental Services (DBHDS)
- Department of Health (VDH)
- Department of Juvenile Justice (DJJ)
- Frontier Culture Museum of Virginia (FCMV)

Inventories maintained by the Virginia Lottery (major enterprise fund) and the Virginia Industries for the Blind (nonmajor enterprise fund) are stated at cost using the average cost methodology.

Inventories maintained by the Virginia Museum of Fine Arts (nonmajor enterprise fund), the Science Museum of Virginia (nonmajor enterprise fund), and the Consolidated Laboratory (nonmajor enterprise fund) are stated at cost using FIFO.

Inventories maintained by the Alcoholic Beverage Control (major enterprise fund) and the Virginia Industries for the Blind (nonmajor enterprise fund) are stated at average cost using the weighted average method.

Inventories maintained by Correctional Enterprises (internal service fund) are stated at the lower of cost or market using FIFO. Inventories maintained by the internal service funds except for Correctional Enterprises are stated at cost using FIFO.

Institutions of higher education (nonmajor component units) use several methods for inventory valuations, including cost using FIFO, the lower of cost or market using FIFO, or weighted average methods. Inventories maintained by the Virginia Port Authority (nonmajor component unit), the Hampton Roads Sanitation District Commission (nonmajor component unit), and the Danville Science Center (nonmajor component unit) are reported using the moving average unit cost methodology. Inventories at the gift shop run by the Library of Virginia Foundation (nonmajor component unit) are reported using the average cost methodology.

L. Prepaid Items

Prepaid assets for rent, insurance, and similar items are recognized when purchased and expensed when used.

M. Loans Receivable/Payable

Loans Receivable/Payable represents working capital advances between the primary government and component units (see Note 11).

N. Other Assets

Other Assets include those balances of a miscellaneous nature that are not specifically classified elsewhere. Additionally, it includes the Virginia Sickness and Disability Program Net Other Postemployment Benefit Plan Asset applicable to the proprietary and private purpose funds (see Note 12).
O. Capital Assets

Capital assets of governmental funds are recorded as expenditures at the time of purchase and capitalized in the governmental activities column of the Government-wide Statement of Net Position. Capital assets of the other funds and component units are capitalized in the fund in which they are utilized. All depreciable capital assets are depreciated on the straight-line basis over their useful lives (see Note 14).

Capital assets are stated at historical cost or, in some instances, estimated historical cost. Assets received pursuant to service concession arrangements and donated capital assets from entities external to the reporting entity are stated at acquisition value when they are placed in service or at the time of donation, respectively. Asset transfers or donations from within the reporting entity are recorded at the carrying value of the transferring entity as required by GASB Statement No. 48, Sales and Pledges of Receivables and Future Revenues and Intra-Entity Transfers of Assets and Future Revenues. The primary government capitalizes all equipment that has a cost or value greater than $50,000 and expected useful life of greater than two years. The primary government capitalizes all land, water rights/easements, buildings, infrastructure, and software that have a cost or value greater than $100,000 and an expected useful life of greater than two years. Selected agencies, business-type entities, and component units utilize a capitalization limit lower or higher than the primary government’s established thresholds for various reasons. Accordingly, reported capital assets may include some items that cost less than those thresholds. Infrastructure, including highways, bridges, and rights-of-way, is capitalized using the historical approach and includes any assets acquired prior to fiscal year 1980.

The primary government’s capitalization policy regarding works of art/historical treasures is that capitalization is encouraged, but not required, for works of art/historical treasures that meet the following conditions:

- The collection is held for public exhibition, education, or research in furtherance of public service, rather than financial gain;
- The collection is protected, kept unencumbered, cared for and preserved; and,
- The collection is subject to an organizational policy that requires the proceeds from sales of collection items to be used to acquire other items for the collection.

The primary government capitalizes construction-in-progress when project expenditures, including construction of intangible assets, exceed $100,000. Interest incurred during construction is not capitalized in governmental funds. Interest incurred during the construction of proprietary fund assets is included in the capitalized value of the asset. The total interest cost incurred during the fiscal year was $1.3 million. None of the interest cost incurred this fiscal year was capitalized.

Expenditures are classified as construction-in-progress if:

1. They extend the asset life, improve productivity, or improve the quality of service; and,
2. They fall into the planning, acquisition, construction, improvement, renovation, repair, replacement, relocation, or demolition phase of the asset life.

The estimated lives of capital assets are as follows:

<table>
<thead>
<tr>
<th>Asset Type</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buildings</td>
<td>10–75</td>
</tr>
<tr>
<td>Equipment</td>
<td>2–50</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>5–50</td>
</tr>
<tr>
<td>Software</td>
<td>5–35</td>
</tr>
</tbody>
</table>

Selected agencies, business-type entities, and component units may utilize estimated lives and policies that differ from the above for various reasons.

P. Deferred Outflows of Resources

Deferred outflows of resources are a consumption of assets by the government that is applicable to a future reporting period. Deferred outflows have a natural debit balance and, therefore increase net position similar to assets (see Notes 15, 16, 17, and 19).

Q. Accounts Payable

Accounts payable represent amounts, including salaries and wages, owed for goods and services received prior to year-end. In accordance with GASB Statement No. 33, Accounting and Financial Reporting for Nonexchange Transactions, accounts payable also includes payments for nonexchange transactions that met eligibility requirements prior to fiscal year-end (see Note 26).

R. Unearned Revenue

Unearned revenue represents monies received or revenues accrued but not earned as of June 30, 2019. The majority of unearned revenue is reported by higher education institutions (nonmajor component units), where it is primarily composed of revenue for student tuition accrued in advance of the semester and advance payments on grants and contracts.

In the special revenue funds, unearned revenue is composed primarily of prepaid toll revenue, contributions from localities and private sectors for highway construction projects, multi-year vehicle registrations recorded in the Commonwealth Transportation Fund (major), and multi-year motor vehicle safety inspections, emission inspections, mining permits, and hunting, fishing, and trapping licenses recorded in the Other and Health and Social Services Funds (nonmajor).
In the enterprise funds, a majority of unearned revenue represents online ticket monies received by the Virginia Lottery (major) for which corresponding drawings have not been held and test kits and certifications from Consolidated Labs (nonmajor) which are paid for prior to shipping and certification being performed.

Unearned revenue in the internal service funds primarily represents unearned premiums in the Risk Management Fund; advanced customer receipts in the Virginia Information Technologies Agency Fund; and prepaid rent and work orders in the Property Management Fund.

Unearned revenues in the other component units consist primarily of fees related to various activities.

S. Unearned Taxes

Unearned taxes represent income taxes related to the period January through June 2019. This amount is the estimate to be refunded (overpayments by taxpayers) reduced by the estimate to be received (underpayments from taxpayers) that will be finalized when income tax returns are filed in subsequent years. Individual income tax estimated overpayments total $1.0 billion and estimated underpayments total $1.1 billion. When underpayments exceed overpayments, revenue on the fund statements is only recognized to the extent of estimated overpayments. Since underpayments exceed overpayments for the individual income taxes, the unearned tax amount is zero for the fiscal year.

Corporate income tax estimated overpayments total $44.1 million and estimated underpayments total $70.1 million. When underpayments exceed overpayments, revenue on the fund statements is only recognized to the extent of estimated overpayments. Since underpayments exceed overpayments for the corporate income taxes, the unearned tax amount is zero for the fiscal year.

T. Obligations Under Securities Lending Program

In accordance with GASB Statement No. 28, Accounting and Financial Reporting for Securities Lending Transactions, liabilities resulting from these transactions have been recorded as obligations under securities lending transactions.

U. Due to Claimants, Participants, Escrows and Providers

Due to claimants, participants, escrows and providers represent monies that the Commonwealth is holding on behalf of third parties as of June 30, 2019. In governmental funds, the majority of the amount represents estimated unclaimed and escheat property that the Commonwealth is holding until claimed by the rightful owner.

In the enterprise funds, the amounts represent payments due to benefit claimants and employers for tax overpayments in the Unemployment Compensation Fund (major) and to participants of the Prepaid529 Program in the Virginia College Savings Plan (major).

In the private purpose trust funds, the amounts represent payments due to participants in the Invest529 Program offered by the Virginia College Savings Plan.

In the agency funds, these amounts represent funds used for employee benefits and child support enforcement, as well as accounts of inmates, residents, and patients of the Commonwealth’s correctional, juvenile, veterans, and behavioral health facilities.

V. Other Liabilities

Other liabilities represent amounts owed for various governmental and proprietary activities. Some of these amounts will be paid shortly after fiscal year-end (see Note 27).

W. Claims Payable

Claims payable, reported in the proprietary funds of the primary government, represent both health and liability insurance claims payable as of June 30, 2019. This includes both actual claims submitted, as well as actuarially determined claims incurred but not reported. Claims relating to the primary government’s liability insurance programs are reported in the Risk Management – internal service fund and the Risk Management – nonmajor enterprise fund. Also, health insurance claims are reported in the Health Care – internal service fund, the Local Choice Health Care – nonmajor enterprise fund and Line of Duty – internal service fund and nonmajor enterprise fund (see Notes 25.A. and 25.B.). Claims payable reported by the Virginia Commonwealth University Health System Authority (a blended component unit of the Virginia Commonwealth University – nonmajor component unit) represents estimated malpractice, workers’ compensation, and medical claims payable amounts.

X. Long-term Liabilities

In the government-wide financial statements, long-term debt and other long-term obligations are reported as liabilities in the applicable governmental activities or business-type activities column. The governmental fund statements reflect the portion of long-term liabilities that will be paid from expendable resources that represent payments to employees for separations that occurred prior to June 30, 2019. The proprietary fund statements and discrete component unit statements reflect total long-term liabilities and distinguish between those portions payable within one year and those payable in future years (see Note 28).

Bond premiums and discounts are amortized over the life of the bond. Bonds payable are reported net of the applicable bond premium or discount. Bond issuance costs, excluding prepaid insurance, are expensed.

Expenditures for principal and interest payments for governmental fund general obligation bonds and revenue bonds are recognized in the Debt Service Fund
(nonmajor) when due. In the fund statements, governmental fund types recognize bond premiums and discounts, as well as bond issuance costs, during the current period. The face amount of debt issued is reported as other financing sources. Premiums received on debt issuances are reported as other financing sources while discounts on debt issuance are reported as other financing uses. Issuance costs, whether or not withheld from the actual debt proceeds received, are reported as debt service expenditures (see Note 28).

Y. Deferred Inflows of Resources

Deferred inflows of resources are an acquisition of assets by the government that is applicable to a future reporting period. Deferred inflows have a natural credit balance and, therefore decrease net position similar to liabilities (see Notes 15, 16, 17, 19, and 38).

Z. Nonspendable Fund Balances

Nonspendable fund balances indicate that portion of fund balance that cannot be spent because it is either not in spendable form or is legally or contractually required to be maintained intact.

AA. Restricted Fund Balances

Restricted fund balances are amounts that have constraints placed on the use of resources that are either (a) externally imposed by creditors (such as through debt covenants), grantors, contributors, or laws or regulations of other governments, or (b) imposed by law through constitutional provisions or enabling legislation.

BB. Committed Fund Balances

Committed fund balance includes amounts that must be spent for specific purposes that have been legislatively mandated by the Governor and General Assembly. Further action by the Governor and the General Assembly would be required to modify these commitments.

CC. Assigned Fund Balances

Assigned fund balances are amounts that are constrained by the government’s intent to be used for specific purposes, but are neither restricted nor committed. Assignments are identified by Commonwealth management pursuant to the delegation of authority granted by the General Assembly and Governor specified in the Appropriation Act.

DD. Unassigned Fund Balances

Unassigned fund balance is the amount of fund balance that has not been assigned to other funds and has not been restricted, committed or assigned to specific purposes within the General Fund. The General Fund is the only fund that could potentially report a positive unassigned fund balance amount. Additionally, accrued liabilities exceed accrued assets on the modified accrual basis for the Unclaimed Property Fund (nonmajor special revenue) by $62.6 million. As there are no assigned balances in the fund to offset the negative fund balance restricted for specific purposes, the amount is reported as Unassigned Fund Balance.

EE. Cash Management Improvement Act

Included in Amounts Due to Other Governments is the Commonwealth’s Cash Management Improvement Act (CMIA) interest liability to the federal government, which is calculated in accordance with the interest calculation and exchange provisions of the Federal Cash Management Improvement Act of 1990. The Commonwealth’s interest liability is subject to review and final confirmation by the Bureau of the Fiscal Service (BFS) of the U.S. Treasury. If required, the payment is to be made on March 31 of the following year. Payment will be made from a sum sufficient appropriation authorized for this purpose by the Appropriation Act. The CMIA interest rate of exchange is based by law on the average of the bond equivalent rates of 13-week Treasury Bills auctioned during the annual reporting period as calculated by BFS.

FF. Investment Income

In accordance with GASB Statement No. 31, Accounting and Financial Reporting for Certain Investments and for External Investment Pools, all investment income reported in the accompanying financial statements include changes in the fair value of investments and the amount reported may be negative. Additionally, the Commonwealth’s policy is to record all unrealized gains or losses for the State Treasurer’s Portfolio in the General Fund.

GG. Intrafund Eliminations

Eliminations have been incorporated into the report to eliminate intrafund transactions within the related fund type. These eliminations prevent overstatement of financial activity.

HH. Interfund Activity

Generally, the effect of interfund activity has been eliminated from the government-wide statements, with the exception of interfund services provided and used between functions. Elimination of these activities would distort the direct costs and program revenues for the functions.

In the fund financial statements, transfers represent the movement of resources between funds. For example, transfers are recorded when a fund receives revenue and subsequently disburses the resources to another fund for expenditure.
2. RESTATEMENT OF BEGINNING BALANCES

The government-wide beginning balance restatements resulted from the following:

**Government-wide Activities**

**Governmental Activities**

- The Virginia Department of Transportation (VDOT) misstated deferred outflows of resources related to debt defeasance by $73.7 million which overstated prior year Net Position.
- Capital Asset balances were restated by a total of $2.7 million. This resulted primarily from errors by various agencies resulting in a $38.4 million overstatement of prior year Construction-in-Progress balances, offset by a $35.7 million understatement of prior year net depreciable capital assets.
- The Debt Service Fund (nonmajor) has been restated by $17.1 million to include loan receivables related to selected debt service payments previously omitted by VDOT.

**Fund Statements**

- The Debt Service Fund (nonmajor governmental) has been restated by $1.8 million as previously discussed.

**Component Units**

The government-wide and fund statements were restated for the following.

- The Virginia Commonwealth University (nonmajor) and George Mason University (nonmajor) have restated the beginning balance by $32.1 million, to include the following discrete component units of the universities: Dentistry@VCU and Mercatus Center, Inc., respectively. Previously, these entities were not considered discrete component units of the universities.

### Beginning Balance Restatement

(Dollars in Thousands)

<table>
<thead>
<tr>
<th></th>
<th>Balance as of June 30, 2018</th>
<th>Change in Reporting Entity</th>
<th>Correction of Prior Year Errors</th>
<th>Balance as of June 30, 2018, as restated</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Government-wide Activities:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary Government:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Governmental Activities</td>
<td>$ 22,330,226</td>
<td>$ —</td>
<td>$(59,338)</td>
<td>$ 22,270,888</td>
</tr>
<tr>
<td>Business-type Activities</td>
<td>$ 2,066,478</td>
<td>—</td>
<td>—</td>
<td>$ 2,066,478</td>
</tr>
<tr>
<td>Total Primary Government</td>
<td>$ 24,396,704</td>
<td>$ —</td>
<td>$(59,338)</td>
<td>$ 24,337,366</td>
</tr>
<tr>
<td>Component Units</td>
<td>$ 27,816,792</td>
<td>$ 32,131</td>
<td>$ —</td>
<td>$ 27,848,923</td>
</tr>
</tbody>
</table>

| **Fund Statements:**           |                             |                            |                                 |                                        |
| **Governmental Funds:**        |                             |                            |                                 |                                        |
| Major Governmental Funds:      |                             |                            |                                 |                                        |
| General                        | $ 843,454                   | $ —                        | $ —                              | $ 843,454                              |
| Special Revenue Funds:         |                             |                            |                                 |                                        |
| Commonwealth Transportation     | $ 2,327,278                 | —                          | —                                | $ 2,327,278                            |
| Federal Trust                  | $ 107,533                   | —                          | —                                | $ 107,533                              |
| Literary                       | $ 1,035                     | —                          | —                                | $ 1,035                                |
| Nonmajor Governmental Funds    | $ 2,100,441                 | —                          | 1,816                            | $ 2,102,257                            |
| Total Governmental Funds       | $ 5,379,741                 | $ —                        | 1,816                            | $ 5,381,557                            |

| Component Units:               |                             |                            |                                 |                                        |
| Virginia Housing Development Authority | $ 3,283,537 | $ — | $ — | $ 3,283,537 |
| Virginia Public School Authority   | (10,059) | — | — | (10,059) |
| Virginia Resources Authority     | $ 1,615,168 | — | — | $ 1,615,168 |
| Virginia College Building Authority | (4,071,206) | — | — | (4,071,206) |
| Nonmajor Component Units        | $ 26,999,352 | 32,131 | — | $ 27,031,483 |
| Total Component Units           | $ 27,816,792 | $ 32,131 | $ — | $ 27,848,923 |
3. **NET POSITION/FUND BALANCE CLASSIFICATIONS**

**Fund Balance**

GASB Statement No. 54, *Fund Balance Reporting and Governmental Fund Type Definitions*, improved the reporting of fund balance so that classifications are more easily understood and can be applied consistently between information reported in the government-wide financial statements and the governmental fund financial statements. The governmental fund balance classifications defined in GASB Statement No. 54 are: Nonspendable, Restricted, Committed, Assigned, and Unassigned.

Nonspendable fund balance includes inventories, prepaid items, and the principal of a permanent fund. These funds are not available for expenditure in the current or following period.

Restricted fund balance includes amounts that have constraints placed on the use of resources by the Constitution of Virginia or a party external to the Commonwealth.

Committed fund balance includes amounts that must be spent for specific purposes that have been legislatively mandated by the Governor and General Assembly.

Assigned fund balance represents amounts that the Commonwealth has identified for planned purposes but for which the intended use is not legislatively mandated. The assignments are identified by Commonwealth management pursuant to the delegation of authority granted by the General Assembly and Governor specified in the Appropriation Act. The following schedule includes committed and assigned amounts that share the same purpose and title. The distinction between these classifications results from whether there is a statutory restriction on certain amounts contained within the fund.

Unassigned fund balance for the General Fund (major) is the residual classification. The General Fund is the only fund that could potentially report a positive unassigned fund balance amount. Additionally, a negative amount indicates that restricted and committed amounts exceed the available modified accrual basis fund balance. Unassigned fund balance for the Unclaimed Property Fund (nonmajor special revenue) indicates that the amount restricted for specific purposes exceeds the modified accrual basis fund balance available for these specific purposes.

The governmental fund balance classifications and amounts as of June 30, 2019, are shown in the following table.
## Governmental Fund Balance Classifications

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>General Fund</th>
<th>Commonwealth Transportation</th>
<th>Federal Trust</th>
<th>Literary</th>
<th>Nonmajor Governmental</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nonspendable</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventory</td>
<td>$28,797</td>
<td>$95,483</td>
<td>$23,813</td>
<td>$7,174</td>
<td>$155,267</td>
</tr>
<tr>
<td>Prepaid Items</td>
<td>73,888</td>
<td>14,453</td>
<td>6,136</td>
<td>9,964</td>
<td>104,441</td>
</tr>
<tr>
<td>Permanent Funds</td>
<td></td>
<td></td>
<td></td>
<td>39,073</td>
<td>39,073</td>
</tr>
<tr>
<td><strong>Total Nonspendable</strong></td>
<td>102,685</td>
<td>109,936</td>
<td>29,949</td>
<td></td>
<td>286,561</td>
</tr>
<tr>
<td><strong>Restricted</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture and Forestry</td>
<td></td>
<td></td>
<td></td>
<td>9,181</td>
<td>9,181</td>
</tr>
<tr>
<td>Capital Projects/Construction/Capital Acquisition</td>
<td></td>
<td></td>
<td></td>
<td>1,366,654</td>
<td>1,366,654</td>
</tr>
<tr>
<td>Contract and Debt Administration</td>
<td></td>
<td></td>
<td></td>
<td>656</td>
<td>656</td>
</tr>
<tr>
<td>Debt Service</td>
<td></td>
<td></td>
<td></td>
<td>45,694</td>
<td>45,694</td>
</tr>
<tr>
<td>Economic and Technological Development</td>
<td></td>
<td></td>
<td></td>
<td>37</td>
<td>37</td>
</tr>
<tr>
<td>Educational and Training Programs</td>
<td></td>
<td></td>
<td></td>
<td>3,480</td>
<td>3,480</td>
</tr>
<tr>
<td>Environmental Quality and Natural Resource Preservation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gifts and Grants</td>
<td>6</td>
<td>97,726</td>
<td></td>
<td>2,648</td>
<td>100,380</td>
</tr>
<tr>
<td>Government Operations:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative Services</td>
<td></td>
<td></td>
<td></td>
<td>1,814</td>
<td>1,814</td>
</tr>
<tr>
<td>Health and Public Safety</td>
<td></td>
<td></td>
<td></td>
<td>73,059</td>
<td>73,059</td>
</tr>
<tr>
<td>Literary Fund</td>
<td></td>
<td></td>
<td></td>
<td>17,834</td>
<td>17,834</td>
</tr>
<tr>
<td>Lottery Proceeds Fund</td>
<td>37,659</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue Stabilization Fund</td>
<td>629,654</td>
<td></td>
<td></td>
<td>629,654</td>
<td></td>
</tr>
<tr>
<td>Transportation Activities</td>
<td></td>
<td>501,614</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia Water Supply Assistance Grant Fund</td>
<td>2,154</td>
<td></td>
<td></td>
<td>2,154</td>
<td></td>
</tr>
<tr>
<td><strong>Total Restricted</strong></td>
<td>669,467</td>
<td>501,620</td>
<td>97,726</td>
<td>17,834</td>
<td>2,812,509</td>
</tr>
<tr>
<td><strong>Committed</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture and Forestry</td>
<td>23</td>
<td></td>
<td></td>
<td>24,091</td>
<td>24,114</td>
</tr>
<tr>
<td>Amount Required for Mandatory Reappropriation</td>
<td>108,175</td>
<td></td>
<td></td>
<td></td>
<td>108,175</td>
</tr>
<tr>
<td>Amount Required for Reappropriation of 2019 Unexpended Balances for Capital Outlay and Restoration Projects</td>
<td>6,739</td>
<td></td>
<td></td>
<td></td>
<td>6,739</td>
</tr>
<tr>
<td>Capital Projects/Construction/Capital Acquisition</td>
<td>1,895</td>
<td></td>
<td></td>
<td>677</td>
<td>2,572</td>
</tr>
<tr>
<td>Central Capital Planning Fund</td>
<td>7,023</td>
<td></td>
<td></td>
<td></td>
<td>7,023</td>
</tr>
<tr>
<td>Commonwealth’s Development Opportunity Fund</td>
<td>26,051</td>
<td></td>
<td></td>
<td></td>
<td>26,051</td>
</tr>
<tr>
<td>Contract and Debt Administration</td>
<td></td>
<td>10,554</td>
<td></td>
<td>805</td>
<td>11,359</td>
</tr>
<tr>
<td>Economic and Technological Development</td>
<td>121,911</td>
<td></td>
<td></td>
<td>46,517</td>
<td>168,428</td>
</tr>
<tr>
<td>Educational and Training Programs</td>
<td>1,159</td>
<td>1,597</td>
<td></td>
<td>9,202</td>
<td>11,958</td>
</tr>
<tr>
<td>Environmental Quality and Natural Resource Preservation</td>
<td>28,587</td>
<td></td>
<td></td>
<td>106,173</td>
<td>134,760</td>
</tr>
<tr>
<td>Government Operations:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative Services</td>
<td>94</td>
<td></td>
<td></td>
<td>89,851</td>
<td>89,945</td>
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<tr>
<td>Legislative Services</td>
<td></td>
<td></td>
<td></td>
<td>228</td>
<td>228</td>
</tr>
<tr>
<td>Health and Public Safety</td>
<td>23,066</td>
<td>4,493</td>
<td></td>
<td>254,187</td>
<td>281,746</td>
</tr>
<tr>
<td>Local Government Fiscal Distress</td>
<td>750</td>
<td></td>
<td></td>
<td></td>
<td>750</td>
</tr>
<tr>
<td>Natural Disaster Sum Sufficient</td>
<td>21,328</td>
<td></td>
<td></td>
<td></td>
<td>21,328</td>
</tr>
<tr>
<td>Regulatory Oversight</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue Reserve Fund</td>
<td>502,590</td>
<td></td>
<td></td>
<td>502,590</td>
<td></td>
</tr>
<tr>
<td>Taxpayer Relief Fund</td>
<td>30,684</td>
<td></td>
<td></td>
<td>30,684</td>
<td></td>
</tr>
<tr>
<td>Transportation Activities</td>
<td></td>
<td>2,254,518</td>
<td></td>
<td>4,410</td>
<td>2,258,928</td>
</tr>
<tr>
<td>Virginia Communication Sales and Use Tax</td>
<td>5,940</td>
<td></td>
<td></td>
<td></td>
<td>5,940</td>
</tr>
<tr>
<td>Virginia Health Care Fund</td>
<td>53,014</td>
<td></td>
<td></td>
<td></td>
<td>53,014</td>
</tr>
<tr>
<td>Virginia Water Quality Improvement Fund</td>
<td>34,337</td>
<td></td>
<td></td>
<td></td>
<td>34,337</td>
</tr>
<tr>
<td>Virginia Water Quality Improvement Fund-Part A</td>
<td>87,645</td>
<td></td>
<td></td>
<td></td>
<td>87,645</td>
</tr>
<tr>
<td>Virginia Water Quality Improvement Fund-Part B</td>
<td>33,139</td>
<td></td>
<td></td>
<td></td>
<td>33,139</td>
</tr>
<tr>
<td><strong>Total Committed</strong></td>
<td>1,094,750</td>
<td>2,271,162</td>
<td></td>
<td></td>
<td>4,043,902</td>
</tr>
<tr>
<td><strong>Assigned</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture and Forestry</td>
<td></td>
<td></td>
<td></td>
<td>43</td>
<td>43</td>
</tr>
<tr>
<td>Economic and Technological Development</td>
<td></td>
<td></td>
<td></td>
<td>2,193</td>
<td>2,193</td>
</tr>
<tr>
<td>Educational and Training Programs</td>
<td></td>
<td></td>
<td></td>
<td>8,814</td>
<td>8,814</td>
</tr>
<tr>
<td>Environmental Quality and Natural Resource Preservation</td>
<td></td>
<td></td>
<td></td>
<td>7,604</td>
<td>7,604</td>
</tr>
<tr>
<td>Government Operations:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative Services</td>
<td></td>
<td></td>
<td></td>
<td>530</td>
<td>530</td>
</tr>
<tr>
<td>Health and Public Safety</td>
<td></td>
<td></td>
<td></td>
<td>14,826</td>
<td>14,826</td>
</tr>
<tr>
<td>Regulatory Oversight</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Assigned</strong></td>
<td></td>
<td></td>
<td></td>
<td>34,013</td>
<td>34,013</td>
</tr>
<tr>
<td><strong>Unassigned</strong></td>
<td>(264,229)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Fund Balance</strong></td>
<td>$1,602,673</td>
<td>$2,882,718</td>
<td>$127,675</td>
<td>$17,834</td>
<td>$2,231,456</td>
</tr>
</tbody>
</table>

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4. DEFICIT FUND BALANCES/NET POSITION

The Unclaimed Property (nonmajor special revenue fund) ended the year with a deficit net position balance of $62.1 million. This deficit was a result of the accrued liabilities estimated to be paid to claimants exceeding the assets remaining in the fund as of June 30.

The Virginia Lottery (major enterprise fund), Alcoholic Beverage Control (nonmajor enterprise fund), the Virginia Museum of Fine Arts Gift Shop (nonmajor enterprise fund), the Personnel Management Information System Fund (internal service fund), and the Payroll Service Bureau (internal service fund) ended the year with deficit net positions of $32.2 million, $90.7 million, $734,430, $412,280, and $2.3 million, respectively. This was solely attributable to the net pension liability resulting from GASB Statement No. 68, Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27, and the other postemployment benefits (OPEB) obligation resulting from GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions.

The Risk Management Fund (nonmajor enterprise fund) ended the year with a deficit net position balance of $14.7 million. The deficit was a result of previous increases in claims liability for constitutional officers' programs exceeding premiums collected. Further, there are noncurrent liabilities related to net pension liabilities and other postemployment benefit obligations.

The Department of General Services’ Consolidated Laboratory Services Fund (nonmajor enterprise fund) ended the year with a deficit net position balance of $5.1 million. The deficit was a result of increased costs for the Newborn Screening Program and noncurrent liabilities related to net pension liabilities and other postemployment benefit obligations.

The Department of Environmental Quality’s Title V Air Pollution Permit Fund (nonmajor enterprise fund) ended the year with a deficit net position balance of $10.2 million. The deficit was a result of accumulated deficits from prior years for decreasing revenues for Title V permits. Further, there are noncurrent liabilities related to net pension liabilities and other postemployment benefit obligations.

The Virginia Information Technologies Agency (internal service fund) ended the year with a deficit net position balance of $26.3 million. The deficit was a result of accumulated deficits from prior years, additional expenses for the transition from Northrup Grumman to multiple suppliers, and noncurrent liabilities related to net pension liabilities and other postemployment benefit obligations.

The Enterprise Application Fund (internal service fund) ended the year with a deficit net position balance of $15.2 million. The deficit was a result of working capital advances for the Human Capital Management replacement project and noncurrent liabilities related to net pension liabilities and other postemployment benefit obligations.

The Property Management Fund (internal service fund) ended the year with a deficit net position balance of $19.9 million. This deficit was the result of the purchase of a leasehold interest in a state-owned building in fiscal year 2006. Also, the Property Management Fund incurred additional capital lease liabilities due to transfers of leases from other state agencies in fiscal year 2009. Additionally, in fiscal year 2012, the Property Management Fund entered into three energy leases where the asset is reported in the governmental fund and the liability is recorded in the internal service fund. In fiscal year 2018, the Property Management Fund entered into a new energy performance contract where the asset is reported in the governmental fund and the liability is recorded in the internal service fund. Further, there are noncurrent liabilities related to net pension liabilities and other postemployment benefit obligations.

The Risk Management Fund (internal service fund) ended the year with a deficit net position balance of $570.5 million. The deficit was the result of the Worker’s Compensation Program having estimated claims payable exceeding the available equity in the fund. Claims are paid on a pay-as-you-go basis. To the extent that claims exceed current resources, they will ultimately become a liability of the fund from which the claim originated. Further, there are noncurrent liabilities related to net pension liabilities and other postemployment benefit obligations.

The Virginia College Building Authority (major component unit) ended the year with a deficit net position balance of $4.3 billion. This deficit occurs because the Authority issued bonds for the 21st Century College and Equipment programs subject to future appropriations from the General Fund of the Commonwealth without any other security. These future appropriations are not included as assets of the Authority.

The Southern Virginia Higher Education Center (nonmajor component unit) ended the year with a deficit net position balance of $1.2 million. This deficit is solely attributable to net pension liabilities and other postemployment benefit obligations.

The Virginia Economic Development Partnership (nonmajor component unit) ended the year with a deficit net position balance of $4.6 million. This deficit is related to net pension liabilities and other postemployment benefit obligations.

The Virginia Tourism Authority (nonmajor component unit) ended the year with a deficit net position balance of $1.8 million. This deficit is related to net pension liabilities and other postemployment benefit obligations.
5. REVENUE STABILIZATION FUND

In accordance with Article X, Section 8 of the Constitution of Virginia, the amount estimated as required for deposit to the Revenue Stabilization Fund must be appropriated for that purpose by the General Assembly.

Under the provisions of Article X, Section 8 of the Constitution of Virginia, a deposit of $262.9 million is required during fiscal year 2020 based on fiscal year 2018 revenue collections. Further, a deposit of $77.4 million is required during fiscal year 2021 based on fiscal year 2019 revenue collections reduced by the taxpayer refunds required by Chapter 854. For additional information, see Note 7. Both the $262.9 million and the $77.4 million deposits are reported as restricted components of fund balance.

In addition, Chapter 854, 2019 Acts of Assembly, appropriates an additional $97.5 million to be deposited in fiscal year 2020.

Section 2.2-1829(b) of the Code of Virginia requires an additional deposit into the Fund when specific criteria have been met. No such deposit is required since the specified criteria were not met for fiscal year 2019.

The Revenue Stabilization Fund has principal and interest on deposit of $289.3 million restricted as a part of the General Fund balance. Pursuant to the constitutional amendment of Article X, Section 8, effective January 1, 2011, the amount on deposit cannot exceed 15.0 percent of the Commonwealth’s average annual tax revenues derived from taxes on income and retail sales for the preceding three fiscal years. As of June 30, 2019, the Constitutional maximum is $2.8 billion.

6. REVENUE RESERVE FUND

Section 2.2-1831.2 of the Code of Virginia established the Revenue Reserve Fund. As of June 30, 2019, the fund has principal and interest on deposit of $502.6 million committed as a part of the General Fund balance.

This fund was established in accordance with Chapter 854, 2019 Acts of Assembly, to mitigate certain anticipated revenue shortfalls when appropriations based on previous revenue forecasts exceed expected revenues in subsequent forecasts. Annually, revenue collections are evaluated to determine whether deposits are required to the fund. While no statutory deposit is required when there is a constitutionally mandated deposit to the Revenue Stabilization Fund, the Department of Planning and Budget has identified a planned voluntary deposit during fiscal year 2020 of $270.8 million.

Pursuant to Section 2.2-1831.3 of the Code of Virginia, any required annual deposit cannot exceed 1.0 percent of the total general fund revenues for the prior fiscal year. Additionally, the combined balance of the Revenue Reserve Fund and the Revenue Stabilization Fund cannot exceed 15.0 percent of the total Commonwealth’s average annual tax revenues derived from taxes on income and retail sales for the preceding three fiscal years. As of June 30, 2019, the calculated maximum balance for the Revenue Reserve Fund is $2.5 billion.

7. TAXPAYER RELIEF FUND

The Taxpayer Relief Fund was established in accordance with Chapter 854, 2019 Acts of Assembly, Item 3-5.21. The revenues generated by the individual reform provisions of the federal Tax Cuts and Jobs Act that exceed revenue collections reasonably expected due to general economic growth absent the federal policy change, less revenues needed to implement the policy changes, for fiscal years 2019 through 2025, will be reported in this fund. For the fiscal year ended June 30, 2019, $455.0 million was deposited to the fund. Pursuant to the fourth enactment of Chapters 17 and 18, 2019 Acts of Assembly, certain taxpayers received refunds totaling $424.3 million subsequent to June 30. This amount is reported as a liability in the accompanying financial statements. The remaining balance of $30.7 million is committed as part of the General Fund balance.

8. CASH, CASH EQUIVALENTS, AND INVESTMENTS

As of June 30, 2019, the carrying amount of cash for the primary government (including pension and other employee benefit trust funds) was $5.6 billion and the bank balance was $372.6 million. The carrying amount of cash for component units was $2.0 billion and the bank balance was $841.1 million. Cash equivalents are investments with an original maturity of 90 days or less. Cash and cash equivalents for foundations (component units) totaled $504.2 million as of year-end. A portion of this amount and some balances during the year exceeded Federal Deposit Insurance Corporation (FDIC) insurance coverage. Foundation investments are disclosed in the Interest Rate Risk section of this note. Note 8 includes investment derivatives for the primary government and excludes derivatives for the component units. For additional information concerning derivative instruments, see Note 16.

For purposes of this note, primary government includes governmental, business-type activities, and fiduciary funds. The deposits of the primary government and the component units, excluding foundations (component units), are secured in accordance with the provisions of the Virginia Security for Public Deposits Act, Section 2.2-4400 et seq. of the Code of Virginia. The act requires any public depository that receives or holds public deposits to pledge collateral to the Treasury Board to cover public deposits in excess of Federal deposit insurance. The required collateral percentage is determined by the Treasury Board and ranges from 50.0 percent to 100.0 percent for financial institutions choosing the dedicated method of collateralization. As stated in Note 1.1F, unrealized gains or losses for the State Treasurer’s Portfolio are recorded in the General Fund. Public Depositors are required to secure their deposits pursuant to several applicable provisions of the law.

The Local Government Investment Pool Act, Section 2.2-4600 of the Code of Virginia, created the Local Government Investment Pool (Pool) program for the benefit of public entities of the Commonwealth. The Treasury Board of Virginia is granted administration of the Local Government.
Investment Pool (LGIP) and Local Government Investment Pool – Extended Maturity (LGIP EM) on behalf of the participating public entities of the Commonwealth. Participation in this pool is voluntary. Both LGIP and LGIP EM offer two professionally managed investment portfolios in accordance with the Investment of Public Funds Act. The LGIP portfolio is a diversified portfolio structured to provide public entities an investment alternative that seeks to minimize the risk of principal loss while offering daily liquidity, a stable Net Asset Value (NAV), and a competitive rate of return. The LGIP is not registered with the Securities Exchange Commission (SEC) as an investment company. The LGIP EM portfolio is a diversified portfolio with fluctuating NAV structured to provide an investment alternative to public entities who wish to invest monies not needed for daily liquidity. The fair value of the Commonwealth’s position in the Pool is the same as the value of the Pool shares for all except for the LGIP EM whose shares fluctuate with changes in the market value of the portfolio.

Certain deposits are held by trustees in accordance with the Trust Subsidiary Act, Section 6.2-1057 of the Code of Virginia. The act requires that cash held by trustees while awaiting investment or distribution is not to be used by an affiliate bank of the trustee in the conduct of its business unless the affiliate bank delivers securities to the trust department as collateral that is at least equal to the fair value of the trust funds held on deposit in excess of amounts insured by the FDIC.

The Commonwealth is authorized, in accordance with the guidelines set forth in Section 2.2-4500 et seq. of the Code of Virginia, to invest public funds in the following:

- U.S. Treasury and agency securities
- Corporate debt securities
- Asset–backed securities
- Mortgage–backed securities
- Municipal securities
- AAA rated obligations of foreign governments
- Bankers’ acceptances and bank notes
- Negotiable certificates of deposit
- Repurchase agreements
- Money market funds

Permitted investments include agency mortgage-backed securities, corporate or private label mortgage-backed securities, and asset-backed securities which by definition usually expose the investor to prepayment risk. Prepayment risk, or the prepayment option granted the borrower, can create uncertainty concerning cash flows, can affect the price of the security causing negative convexity, and can expose the investor to reinvestment risk. Similarly, many agency and corporate securities are callable after some predetermined date at a predetermined price. The call options in regular agency debentures and some corporate securities can be open ended and may significantly impact cash flows, security pricing, and reinvestment risks of these securities.

As of June 30, 2019, the State Treasurer held no security that was in default as to principal or interest and had no securities that were out of compliance with guidelines.

Public funds held by the Commonwealth, public officers, municipal corporations, political subdivisions, and any other public body of the Commonwealth shall be held in trust for the citizens of the Commonwealth. Any investment of such funds shall be made solely in the interest of the citizens of the Commonwealth and with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims.

Certain investments held in trust by the State Treasurer in accordance with bond indentures and resolutions may have more restrictive investment policies. Investment policies of component units are established by the entity’s governing boards.

The information presented for the external investment pools was obtained from audited financial statements. Copies of the LGIP and LGIP EM report may be obtained from the Department of the Treasury website at www.trs.virginia.gov.

The Board of Trustees (the Board) of the Virginia Retirement System (the System) (part of primary government) has full power to invest and reinvest the trust funds in accordance with Section 51.1-124.30 of the Code of Virginia, as amended. This section requires the Board to discharge its duties solely in the interests of members, retirees, and beneficiaries. It also requires the Board to invest the assets with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims. The Board must also diversify such investments so as to minimize the risk of large losses, unless under the circumstances, it is clearly prudent not to do so. The Board does not have investment policies that place specific restrictions on investments related to custodial risk, interest rate risk, credit risk, or foreign currency risk. The System’s investment portfolio is intended to be managed through diversification and prudent judgment, rather than through specific policy restrictions.

Custodial Credit Risk

Custodial credit risk for deposits is the risk that, in the event of a depository bank failure, the Commonwealth may not be able to recover deposits or collateral securities that are in the possession of an outside party. Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty, the Commonwealth may not be able to recover the value of its investment or collateral securities that are in the possession of an outside party.

Policies related to custodial credit risk pertaining to the Commonwealth’s securities lending program are found in the securities lending section of this note.

As of June 30, 2019, the primary government (excluding pension and other employee benefit trust funds) had $766,124 in bank balances that were uninsured and uncollateralized. There is no deposit policy that addresses custodial credit risk.

As of June 30, 2019, investment securities for the System (excluding cash equivalents and repurchase agreements held as securities lending collateral) were registered and

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held in the name of the System for the benefit of the System’s trust funds and were not exposed to custodial credit risk. It is the standard practice and policy of the System, through the relevant provisions in its contracts and agreements with third parties, to minimize all known custodial credit risks.

As of June 30, 2019, component units had $73.6 million in bank balances that were uninsured and uncollateralized, and $16.2 million in bank balances that were uninsured and collateralized with securities held by the pledging financial institution. In addition, the Virginia Housing Development Authority (major component unit) held $293.7 million of investments, primarily commercial paper, that were uninsured and held by the counterparty as of June 30, 2019.

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates of debt investments will adversely affect the fair value of an investment. As discussed in Note 1.F., the Commonwealth discloses the risk for its debt investments using the segmented time distribution method for the primary government (excluding the Virginia College Savings Plan’s Prepaid529 and Invest529 programs, and pension and other employee benefit trust funds) and component units, and the effective duration method for Virginia College Savings Plan (Prepaid529 and Invest529 programs) and the System (pension and other employee benefit trust funds).

The State Treasurer’s guidelines limit the following maximum durations for any single security of the following investment types:

<table>
<thead>
<tr>
<th>Security Type</th>
<th>Maximum Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate Security</td>
<td>15 years</td>
</tr>
<tr>
<td>Asset-Backed Securities</td>
<td>5 years</td>
</tr>
<tr>
<td>Sovereign Government Obligations (excluding U.S.)</td>
<td>5 years</td>
</tr>
<tr>
<td>Negotiable Certificates of Deposit and Negotiable Bank Notes</td>
<td>5 years</td>
</tr>
</tbody>
</table>

The State Treasurer’s guidelines further describe target durations for the overall general account portfolio of 1.7 years.

The Virginia College Savings Plan (Virginia529) manages the risk for fixed income investment securities held in Prepaid529 and Invest529 programs using the effective duration methodology. Virginia529’s Statements of Investment Policy and Guidelines do not limit investment maturities as a mean of managing its exposure to fair value losses arising from increasing interest rates. Although not an explicit requirement, duration of fixed income portfolios, if applicable, is expected to be within 20.0 percent of each portfolio’s designated benchmark.

The System also manages the risk within its portfolio using the effective duration methodology. It is widely used in the management of fixed income portfolios in that it quantifies, to a much greater degree, the risk of interest rate changes. The methodology takes into account optionality on bonds and scales the risk of price changes on bonds depending on the degree of change in rates and the slope of the yield curve. All of the System’s fixed-income portfolios are managed in accordance with the System’s investment guidelines, most of which are specific as to the degree of interest rate risk that can be taken.

As of June 30, 2019, the System’s investments included $2.4 billion, primarily in corporate bonds and notes, U.S. Treasury and agency securities, supranational and non-U.S. Government bonds and notes, municipal securities, and collateralized mortgage obligations, which are highly sensitive to interest rate fluctuations in that they are subject to early payment in a period of declining interest rates and/or because they have an option adjusted duration of greater than ten years. The resulting reduction in expected total cash flows affects the fair value of these securities.

As of June 30, 2019, the Commonwealth’s investments subject to interest rate risk had the following maturities and weighted average effective durations.
### Primary Government Investments

(Excluding Virginia College Savings Plan and Pension and Other Employee Benefit Trust Funds)

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Investment Type</th>
<th>June 30, 2019</th>
<th>Less Than 1</th>
<th>1-5</th>
<th>6-10</th>
<th>More Than 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt Securities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U. S. Treasury and Agency Securities</td>
<td>$803,779</td>
<td>$186,995</td>
<td>$414,067</td>
<td>$122,344</td>
<td>$80,373</td>
</tr>
<tr>
<td>Corporate Bonds and Notes</td>
<td>662,746</td>
<td>230,157</td>
<td>255,174</td>
<td>122,077</td>
<td>55,338</td>
</tr>
<tr>
<td>Supranational and Non-U.S. Government Bonds and Notes</td>
<td>229,035</td>
<td>226,750</td>
<td>2,285</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Commercial Paper</td>
<td>4,222,646</td>
<td>4,222,646</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Negotiable Certificates of Deposit</td>
<td>4,875,634</td>
<td>4,867,122</td>
<td>8,512</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Repurchase Agreements</td>
<td>2,285,067</td>
<td>2,285,067</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Municipal Securities</td>
<td>19,224</td>
<td>2,135</td>
<td>3,222</td>
<td>—</td>
<td>13,867</td>
</tr>
<tr>
<td>Asset-Backed Securities</td>
<td>210,286</td>
<td>241</td>
<td>93,977</td>
<td>34,566</td>
<td>81,502</td>
</tr>
<tr>
<td>Agency Mortgage-Backed Securities</td>
<td>249,263</td>
<td>455</td>
<td>13,839</td>
<td>17,008</td>
<td>217,961</td>
</tr>
<tr>
<td>Agency Unsecured Bonds and Notes</td>
<td>3,973,859</td>
<td>2,992,399</td>
<td>924,689</td>
<td>54,304</td>
<td>2,467</td>
</tr>
<tr>
<td>Mutual and Money Market Funds (Includes SNAP)</td>
<td>1,263,617</td>
<td>1,263,617</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Fixed Income and Commingled Funds</td>
<td>7,598</td>
<td>—</td>
<td>7,598</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$18,802,754</strong></td>
<td><strong>$16,277,584</strong></td>
<td><strong>$1,723,363</strong></td>
<td><strong>$350,299</strong></td>
<td><strong>$451,508</strong></td>
</tr>
</tbody>
</table>

---

### Primary Government - Virginia College Savings Plan Investments

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Investment Type</th>
<th>Weighted Avg. Effective Duration (in years)</th>
<th>Prepaid529 (Major Enterprise Fund)</th>
<th>Invest529 (Private Purpose Trust Fund)</th>
</tr>
</thead>
<tbody>
<tr>
<td>U. S. Treasury and Agency Securities</td>
<td>$247</td>
<td>6.3</td>
<td>—</td>
</tr>
<tr>
<td>Corporate Bonds and Notes</td>
<td>454,950</td>
<td>2.0</td>
<td>117,503</td>
</tr>
<tr>
<td>Convertible Bonds and Notes</td>
<td>117,440</td>
<td>3.3</td>
<td>—</td>
</tr>
<tr>
<td>Asset Backed Securities</td>
<td>78,136</td>
<td>1.4</td>
<td>10,753</td>
</tr>
<tr>
<td>Agency Mortgage Backed Securities</td>
<td>30,859</td>
<td>1.7</td>
<td>—</td>
</tr>
<tr>
<td>Mutual and Money Market Funds</td>
<td>64,918</td>
<td>0.1</td>
<td>67,087 &lt;0.1</td>
</tr>
<tr>
<td>Guaranteed Investment Contracts</td>
<td>125,734</td>
<td>3.0</td>
<td>1,115,737</td>
</tr>
<tr>
<td>Fixed Income and Commingled Funds*</td>
<td>297,669</td>
<td>1.7</td>
<td>815,843</td>
</tr>
<tr>
<td>International and Emerging Markets Funds</td>
<td>280,961</td>
<td>7.6</td>
<td>243,665</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,450,914</strong></td>
<td>3.1</td>
<td><strong>$2,370,588</strong></td>
</tr>
</tbody>
</table>

*Effective duration is calculated using a methodology that takes into account the duration impact of equity warrants and rate-sensitive instruments.
## Primary Government - Virginia Retirement System Investments
(Pension and Other Employee Benefit Trust Funds)
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Investment Type</th>
<th>June 30, 2019</th>
<th>Weighted Avg. Effective Duration (in years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>U. S. Treasury and Agency Securities</td>
<td>$ 4,181,473</td>
<td>6.0</td>
</tr>
<tr>
<td>Corporate Bonds and Notes</td>
<td>10,532,729</td>
<td>3.4</td>
</tr>
<tr>
<td>Collateralized Mortgage Obligations</td>
<td>415,354</td>
<td>2.2</td>
</tr>
<tr>
<td>Commercial Mortgages</td>
<td>439,299</td>
<td>3.9</td>
</tr>
<tr>
<td>Supranational and Non-U.S. Government Bonds and Notes</td>
<td>2,144,283</td>
<td>6.5</td>
</tr>
<tr>
<td>Mutual and Money Market Funds</td>
<td>168,196</td>
<td>4.5</td>
</tr>
<tr>
<td>Commercial Paper</td>
<td>1,990,765</td>
<td>0.1</td>
</tr>
<tr>
<td>Negotiable Certificates of Deposit</td>
<td>435,576</td>
<td>0.2</td>
</tr>
<tr>
<td>Repurchase Agreements</td>
<td>1,401,054</td>
<td>&lt; 0.1</td>
</tr>
<tr>
<td>Municipal Securities</td>
<td>138,049</td>
<td>6.2</td>
</tr>
<tr>
<td>Agencies</td>
<td>3,494,047</td>
<td>2.0</td>
</tr>
<tr>
<td>Fixed Income and Commingled Funds</td>
<td>1,346,297</td>
<td>5.1</td>
</tr>
<tr>
<td>Fixed Income Derivatives</td>
<td>12,637</td>
<td>21.8</td>
</tr>
<tr>
<td>Time Deposits</td>
<td>116,000</td>
<td>&lt; 0.1</td>
</tr>
<tr>
<td>Total</td>
<td>$ 27,911,078</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### Debt Securities - No Effective Duration

- Corporate Bonds and Notes: 96,090 N/A
- Commercial Mortgages: 1,972 N/A
- Supranational and Non-U.S. Government Bonds and Notes: 1,550 N/A
- Mutual and Money Market Funds: 20,393 N/A
- Asset Backed Securities: 17,238 N/A
- Agencies: 46,495 N/A
- Fixed Income and Commingled Funds: 15 N/A
- Fixed Income Derivatives: 4,412 N/A
- Total: $ 27,911,078 N/A

## Component Unit Investments
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Investment Type</th>
<th>June 30, 2019</th>
<th>Less Than 1</th>
<th>1-5</th>
<th>6-10</th>
<th>More Than 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supranational and Non-U.S. Government Bonds and Notes</td>
<td>37,262</td>
<td>37,262</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Corporate Bonds and Notes</td>
<td>499,534</td>
<td>151,939</td>
<td>323,777</td>
<td>20,937</td>
<td>2,881</td>
</tr>
<tr>
<td>Commercial Paper</td>
<td>348,484</td>
<td>348,484</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Negotiable Certificates of Deposit</td>
<td>63,246</td>
<td>48,799</td>
<td>14,447</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Repurchase Agreements</td>
<td>402,650</td>
<td>402,650</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Municipal Securities</td>
<td>201,967</td>
<td>8,653</td>
<td>61,633</td>
<td>75,547</td>
<td>56,134</td>
</tr>
<tr>
<td>Asset-Backed Securities</td>
<td>284,861</td>
<td>17,954</td>
<td>227,695</td>
<td>16,913</td>
<td>22,299</td>
</tr>
<tr>
<td>Agency Unsecured Bonds and Notes</td>
<td>337,163</td>
<td>307,777</td>
<td>29,386</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Agency Mortgage-Backed Securities</td>
<td>762,910</td>
<td>9,004</td>
<td>68,654</td>
<td>9,063</td>
<td>676,189</td>
</tr>
<tr>
<td>Mutual and Money Market Funds (Includes SNAP)</td>
<td>1,043,500</td>
<td>938,447</td>
<td>101,178</td>
<td>3,875</td>
<td>—</td>
</tr>
<tr>
<td>Guaranteed Investment Contracts</td>
<td>36,038</td>
<td>2,520</td>
<td>16,537</td>
<td>15,020</td>
<td>1,961</td>
</tr>
<tr>
<td>Fixed Income and Commingled Funds</td>
<td>124,271</td>
<td>7,837</td>
<td>65,241</td>
<td>—</td>
<td>51,193</td>
</tr>
<tr>
<td>Other Debt Securities</td>
<td>21,814</td>
<td>21,598</td>
<td>146</td>
<td>70</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>$ 4,919,183</td>
<td>$ 2,486,223</td>
<td>$ 1,139,164</td>
<td>$ 300,213</td>
<td>$ 993,583</td>
</tr>
</tbody>
</table>

96 Commonwealth of Virginia
Foundation Investments
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Investment Type</th>
<th>Fair Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Treasury and Agency Securities</td>
<td>$ 856,844</td>
</tr>
<tr>
<td>Common &amp; Preferred Stocks</td>
<td>1,049,178</td>
</tr>
<tr>
<td>Corporate Bonds and Notes</td>
<td>289,094</td>
</tr>
<tr>
<td>Negotiable Certificates of Deposit</td>
<td>21,275</td>
</tr>
<tr>
<td>Municipal Securities</td>
<td>16,005</td>
</tr>
<tr>
<td>Repurchase Agreements</td>
<td>376,563</td>
</tr>
<tr>
<td>Agency Mortgage Backed</td>
<td>18,939</td>
</tr>
<tr>
<td>Mutual and Money Market Funds</td>
<td>794,452</td>
</tr>
<tr>
<td>Bankers' Acceptance</td>
<td>95,243</td>
</tr>
<tr>
<td>Real Estate</td>
<td>505,000</td>
</tr>
<tr>
<td>Index Funds</td>
<td>271,908</td>
</tr>
<tr>
<td>Hedge Funds</td>
<td>2,369,604</td>
</tr>
<tr>
<td>Partnerships</td>
<td>2,782,986</td>
</tr>
<tr>
<td>Venture Capital</td>
<td>642,754</td>
</tr>
<tr>
<td>Other</td>
<td>5,260,172</td>
</tr>
<tr>
<td>Total</td>
<td>$ 15,350,017</td>
</tr>
</tbody>
</table>

Note: Foundations represent FASB reporting entities defined in Note 1.B. A portion of these amounts is reported at cost rather than fair value because fair value was not available or readily determinable.

Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The State Treasurer places emphasis on securities of high credit quality and marketability. At the time of purchase, the following limitations are in place:

- Bankers acceptances: P-1, Moody’s Investors Service (Moody’s) and A-1, Standard & Poor’s (S&P)
- Negotiable CDs and bank notes:
  - maturities of one year or less: P-1, Moody’s and A-1, S&P
  - maturities over one year: Aa, Moody’s and AA, S&P
- Commercial paper: P-1, Moody’s and A-1, S&P
- Corporate Notes and Bonds: A3/A- or equivalent by two nationally recognized rating agencies, one of which must be Moody’s or S&P. However, each external investment manager may invest up to 10.0 percent of their portfolio in Baa2/BBB rated bonds which, at a minimum, must be rated Baa2/BBB by two nationally recognized rating agencies, one of which must be either Moody’s or S&P.
- Municipal Bonds: A3/A- or equivalent by two nationally recognized rating agencies, one of which must be Moody’s or S&P
- Asset-backed securities: AAA by two nationally recognized rating agencies, one of which must be Moody’s or S&P
- Dollar denominated obligations of sovereign governments: Aaa, Moody’s and AAA, S&P
- Commercial Mortgage-Backed Securities (CMBS) and Collateralized Mortgage Obligations (CMOs): AAA by two nationally recognized rating agencies, one of which must be Moody’s or S&P.

The System’s policy for credit risk is based on the concept of a risk budget rather than specific limitations related to the rating of an individual security. The System’s risk budget is allocated among the different investment strategies.

Credit risk for derivative instruments held by the Commonwealth results from counterparty risk assumed by the Commonwealth. This is essentially the risk that the borrower will be unable to meet its obligation. Information regarding the Commonwealth’s credit risk related to derivatives is found in Note 16.

Policies related to credit risk pertaining to the Commonwealth’s securities lending program are found in the Securities Lending section of this note.

The following tables present the credit ratings for the investments of the primary government (excluding pension and other employee benefit trust funds), the System (pension and other employee benefit trust funds), and component units as of June 30, 2019. The ratings presented are using Moody’s, S&P, and Fitch rating scales. They are displayed from short-term to long-term.
Primary Government (Excluding Pension and Other Employee Benefit Trust Funds)

<table>
<thead>
<tr>
<th>Investment Type (1)</th>
<th>P-1 / A-1 / F1</th>
<th>Percent of Portfolio</th>
<th>P-2 / A-2 / F2</th>
<th>Percent of Portfolio</th>
<th>P-3 / A-3 / F3</th>
<th>Percent of Portfolio</th>
<th>Aaa / AAA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Mortgage Backed Securities                        $</td>
<td>—</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>$ 633</td>
</tr>
<tr>
<td>Agency Unsecured Bonds and Notes                         2,458,636</td>
<td>11.6%</td>
<td>—</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>8,941</td>
<td></td>
</tr>
<tr>
<td>Asset Backed Securities                                  —</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>0.0%</td>
<td>279</td>
<td>0.0%</td>
<td>237,732</td>
</tr>
<tr>
<td>Commercial Paper                                         4,222,646</td>
<td>19.8%</td>
<td>—</td>
<td>0.0%</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Convertible Bonds and Notes                              160,467</td>
<td>0.8%</td>
<td>7,433</td>
<td>0.1%</td>
<td>0.0%</td>
<td>4,102</td>
<td>0.0%</td>
<td>—</td>
</tr>
<tr>
<td>Corporate Bonds and Notes                                —</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>192</td>
<td>0.0%</td>
<td>5,161</td>
<td></td>
</tr>
<tr>
<td>Fixed Income and Commingled Funds                        —</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Guaranteed Investment Contracts                          —</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>International and Emerging Markets Funds                 —</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Municipal Securities                                     —</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>—</td>
<td>629</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Mutual and Money Market Funds (Includes SNAP)            —</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>1,391,473</td>
<td></td>
</tr>
<tr>
<td>Negotiable Certificates of Deposit                       4,867,122</td>
<td>22.9%</td>
<td>—</td>
<td>0.0%</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Repurchase Agreements                                    525,000</td>
<td>2.5%</td>
<td>—</td>
<td>0.0%</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Supranational and Non-U.S. Government Bonds and Notes    199,777</td>
<td>0.9%</td>
<td>—</td>
<td>0.0%</td>
<td>—</td>
<td>—</td>
<td>29,258</td>
<td></td>
</tr>
<tr>
<td>Total                                                    $ 12,433,648</td>
<td>58.5%</td>
<td>$ 7,708</td>
<td>0.1%</td>
<td>$ 4,573</td>
<td>0.0%</td>
<td>$ 1,673,827</td>
<td></td>
</tr>
</tbody>
</table>

Component Units

<table>
<thead>
<tr>
<th>Investment Type (1)</th>
<th>P-1 / A-1 / F1</th>
<th>Percent of Portfolio</th>
<th>P-2 / A-2 / F2</th>
<th>Percent of Portfolio</th>
<th>Aaa / AAA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate Bonds and Notes                                $ 244,718</td>
<td>1.1%</td>
<td>—</td>
<td>0.0%</td>
<td>38,705</td>
<td>0.2%</td>
</tr>
<tr>
<td>Collateralized Mortgage Obligations                      —</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>166,026</td>
<td>0.7%</td>
</tr>
<tr>
<td>Commercial Mortgages                                     —</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>323,589</td>
<td>1.4%</td>
</tr>
<tr>
<td>Supranational and Non-U.S. Government Bonds and Notes    1,338</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>35,873</td>
<td>0.2%</td>
</tr>
<tr>
<td>Mutual and Money Market Funds (Includes SNAP)            75,380</td>
<td>0.3%</td>
<td>15,000</td>
<td>0.1%</td>
<td>—</td>
<td>0.0%</td>
</tr>
<tr>
<td>Negotiable Certificates of Deposit                       444,897</td>
<td>2.0%</td>
<td>1,514,033</td>
<td>6.7%</td>
<td>—</td>
<td>0.0%</td>
</tr>
<tr>
<td>Repurchase Agreements                                    —</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
</tr>
<tr>
<td>Municipal Securities                                     —</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>10,761</td>
<td>0.1%</td>
</tr>
<tr>
<td>Asset Backed Securities                                  —</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>350,094</td>
<td>1.6%</td>
</tr>
<tr>
<td>Agencies                                                 —</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>35,757</td>
<td>0.2%</td>
</tr>
<tr>
<td>Fixed Income and Commingled Funds                        6,578</td>
<td>0.2%</td>
<td>9,354</td>
<td>0.2%</td>
<td>6,130</td>
<td>0.2%</td>
</tr>
<tr>
<td>Fixed Income Derivatives                                 —</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
</tr>
<tr>
<td>Time Deposits                                            —</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
</tr>
<tr>
<td>Total                                                    $ 764,995</td>
<td>3.4%</td>
<td>$ 1,529,033</td>
<td>6.8%</td>
<td>$ 1,094,727</td>
<td>4.9%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Investment Type (1)</th>
<th>P-1 / A-1 / F1</th>
<th>Percent of Portfolio</th>
<th>P-2 / A-2 / F2</th>
<th>Percent of Portfolio</th>
<th>P-3 / A-3 / F3</th>
<th>Percent of Portfolio</th>
<th>Aaa / AAA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Mortgage Backed Securities                        $ 3,685</td>
<td>0.1%</td>
<td>—</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>700,755</td>
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</tr>
<tr>
<td>Agency Unsecured Bonds and Notes                         44,812</td>
<td>1.1%</td>
<td>—</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>292,351</td>
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<tr>
<td>Asset Backed Securities                                  4,369</td>
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<td>—</td>
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<td>149</td>
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<td>255,431</td>
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<tr>
<td>Commercial Paper                                         344,696</td>
<td>8.4%</td>
<td>—</td>
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<td>0.0%</td>
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<td></td>
</tr>
<tr>
<td>Corporate Bonds and Notes                                —</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Fixed Income and Commingled Funds                        —</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>—</td>
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<tr>
<td>Municipal Securities                                     —</td>
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<td>—</td>
<td>0.0%</td>
<td>—</td>
<td>32,314</td>
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</tr>
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<td>Mutual and Money Market Funds (Includes SNAP)            1,338</td>
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<td>—</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
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<td>Negotiable Certificates of Deposit                       26,470</td>
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<tr>
<td>Other Debt Securities                                    —</td>
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<tr>
<td>Repurchase Agreements                                    14,567</td>
<td>0.4%</td>
<td>—</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Supranational and Non-U.S. Government Bonds and Notes    —</td>
<td>0.0%</td>
<td>—</td>
<td>0.0%</td>
<td>—</td>
<td>34,784</td>
<td></td>
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</tr>
<tr>
<td>Total                                                    $ 446,515</td>
<td>10.9%</td>
<td>$ 9,354</td>
<td>0.2%</td>
<td>$ 6,279</td>
<td>0.2%</td>
<td>$ 2,213,453</td>
<td></td>
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</table>

(1) Excludes investments of $1.4 billion for primary government (excluding pension and other employee benefit trust funds), $5.4 billion for the System (pension and other employee benefit trust funds), and $795.9 million for component units because obligations of the U. S. Government, obligations explicitly guaranteed by the U. S. Government, or repurchase agreements held by the VRS which are collateralized by equity securities but not considered obligations of the U.S. Government are not considered to have credit risk.
<table>
<thead>
<tr>
<th>Percent of Portfolio</th>
<th>Percent of Portfolio As / AA</th>
<th>Baa / BBB</th>
<th>Percent of Portfolio</th>
<th>Percent of Portfolio Aa / AA</th>
<th>Percent of Portfolio</th>
<th>Less Than Investment Grade</th>
<th>Percent of Portfolio</th>
<th>Unrated</th>
<th>Percent of Portfolio</th>
<th>Grand Total</th>
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<td>$ 277,497</td>
<td>1.3%</td>
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<td>$ —</td>
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<td>$ —</td>
<td>0.0%</td>
<td>$ 1,992</td>
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<td>10</td>
<td>0.0%</td>
<td>66</td>
<td>0.0%</td>
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<td>0.0%</td>
<td>73</td>
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<tr>
<td>1.1%</td>
<td>22,071</td>
<td>0.1%</td>
<td>16,159</td>
<td>0.1%</td>
<td>9,144</td>
<td>0.0%</td>
<td>6,218</td>
<td>0.0%</td>
<td>7,572</td>
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<tr>
<td>0.0%</td>
<td>79,801</td>
<td>0.4%</td>
<td>264,869</td>
<td>1.3%</td>
<td>188,454</td>
<td>0.9%</td>
<td>527,200</td>
<td>2.5%</td>
<td>8,774</td>
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<td>1.3%</td>
<td>188,454</td>
<td>0.9%</td>
<td>527,200</td>
<td>2.5%</td>
<td>8,774</td>
<td>0.0%</td>
</tr>
</tbody>
</table>
Concentration of Credit Risk

Primary Government

Concentration of credit risk is related to the risk of loss that may be attributed to the magnitude of a government’s investment in a single issuer. The State Treasury and the System have individual investment policies limiting the amounts that may be invested in any single issuer.

It is the State Treasurer’s policy that each portfolio will be diversified with no more than 4.0 percent of the value of the fund invested in the securities of any single issuer. This limitation shall not apply to the U.S. Government, or agency thereof, or U.S. Government sponsored corporation securities and fully insured and/or collateralized certificates of deposit. Certain portfolios are limited to amounts less than 4.0 percent of the value of the fund invested in the securities of any single issuer. As of June 30, 2019, more than 5.0 percent of the Commonwealth’s governmental fund investments were in the Federal Home Loan Bank, Federal Farm Credit Bank, and Federal Home Loan Mortgage Corporation. These investments totaled $1.6 billion, $355.1 million, and $298.9 million, respectively. Since these securities are exempted from the State Treasury investment policies, all investments are compliant with investment policies.

The System’s investment guidelines for each specific portfolio also limit investments in any corporate entity to no more than 5.0 percent of the market value of the account for both the internally and externally managed portfolios. The System has no investments in any commercial or industrial organization whose fair value equals 5.0 percent or more of the System’s fiduciary net position.

Foreign Currency Risk

Primary Government

Foreign currency risk is the risk that changes in exchange rates will adversely impact the fair value of an investment. All primary government investments exposed to foreign currency risk were part of the System, the Virginia College Savings Plan’s (Virginia529) Prepaid529 program (major enterprise fund), and the Unclaimed Property portfolios as of June 30, 2019. There is no investment policy related to foreign currency risk for the Unclaimed Property portfolio. Virginia529 has direct exposure to foreign currency risk through investments managed by Advent Capital Management, LLC, which uses currency forward contracts to hedge risks associated with currency fluctuations pursuant to a formal exception to Virginia529’s investment policy.

The System’s foreign currency risk exposures, or exchange rate risk, primarily exist in the international and global equity investment holdings. The Commonwealth’s exposure to foreign currency risk as of June 30, 2019 is highlighted in the following tables.

Component Units

All nonmajor component unit investments exposed to foreign currency risk were part of James Madison University and the Virginia Economic Development Partnership as of June 30, 2019. None of these entities have investment policies related to foreign currency risk.

Foreign Currency Exposures by Asset Class - Primary Government

(Excluding Pension and Other Employee Benefit Trust Funds)

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Currency</th>
<th>Deposits</th>
<th>Common and Preferred Stocks</th>
<th>Equity Index and Pooled Funds</th>
<th>Corporate Bonds</th>
<th>Total</th>
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<tr>
<td>Euro Currency Unit</td>
<td>$8</td>
<td>$126</td>
<td>$19,143</td>
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<td>Hong Kong Dollar</td>
<td>—</td>
<td>4</td>
<td>8,571</td>
<td>8,575</td>
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<tr>
<td>Japanese Yen</td>
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<td>4,745</td>
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<td>Swiss Franc</td>
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<td>4,643</td>
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<td>British Pound Sterling</td>
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<td>52</td>
<td>1,493</td>
<td>1,545</td>
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<td>US Dollar</td>
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<td>Chinese Yuan</td>
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<tr>
<td>Mexican Peso</td>
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<tr>
<td>Total</td>
<td>$196</td>
<td>$1,622</td>
<td>$39,556</td>
<td>$42,709</td>
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</table>
### Foreign Currency Exposures by Asset Class

**Primary Government - Virginia Retirement System**  
(Pension and Other Employee Benefit Trust Funds)  
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Currency</th>
<th>Cash and Short-term Investments</th>
<th>Equity</th>
<th>Fixed Income</th>
<th>Private Equity</th>
<th>Real Assets</th>
<th>International Funds</th>
<th>Forward Contracts</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>U.S. Dollar</td>
<td>$9,123,144</td>
<td>$1,923,144</td>
<td>$1,923,144</td>
<td>$1,923,144</td>
<td>$1,923,144</td>
<td>$1,923,144</td>
<td>$1,923,144</td>
<td>$1,923,144</td>
</tr>
<tr>
<td>Euro Currency Unit</td>
<td>132,496</td>
<td>2,133,693</td>
<td>52,877</td>
<td>771,932</td>
<td>340,555</td>
<td>(1,535,035)</td>
<td>1,896,518</td>
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<tr>
<td>Japanese Yen</td>
<td>18,704</td>
<td>1,884,573</td>
<td>(29)</td>
<td>2,619</td>
<td>246,997</td>
<td>(772,978)</td>
<td>1,379,886</td>
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<tr>
<td>Hong Kong Dollar</td>
<td>8,746</td>
<td>1,058,015</td>
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<td>3,712</td>
<td>(144,382)</td>
<td>926,091</td>
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<tr>
<td>Pound Sterling</td>
<td>5,535</td>
<td>1,154,114</td>
<td>1,084</td>
<td>90,586</td>
<td>(736,940)</td>
<td>514,379</td>
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<tr>
<td>South Korean Won</td>
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<td>808</td>
<td>(17,780)</td>
<td>391,272</td>
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<tr>
<td>Swiss Franc</td>
<td>27,178</td>
<td>566,807</td>
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<td>754</td>
<td>(264,511)</td>
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<tr>
<td>New Zealand Dollar</td>
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<td>17,749</td>
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<td>1,279</td>
<td>333,422</td>
<td>352,688</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canadian Dollar</td>
<td>22,513</td>
<td>808,123</td>
<td>—</td>
<td>(1,535,035)</td>
<td>352,688</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brazil Real</td>
<td>2,925</td>
<td>169,228</td>
<td>81,253</td>
<td>5,457</td>
<td>263,900</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australian Dollar</td>
<td>7,809</td>
<td>592,176</td>
<td>—</td>
<td>5,229</td>
<td>(348,580)</td>
<td>256,634</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indian Rupee</td>
<td>1,096</td>
<td>223,835</td>
<td>75,442</td>
<td>—</td>
<td>10,676</td>
<td>240,700</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South African Rand</td>
<td>1,940</td>
<td>138,199</td>
<td>67,646</td>
<td>524</td>
<td>(19,921)</td>
<td>188,388</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Taiwan Dollar</td>
<td>2,226</td>
<td>180,385</td>
<td>—</td>
<td>4,240</td>
<td>178,371</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thailand Baht</td>
<td>2,204</td>
<td>98,200</td>
<td>24,831</td>
<td>—</td>
<td>8,948</td>
<td>134,183</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swedish Krona</td>
<td>2,226</td>
<td>217,102</td>
<td>—</td>
<td>1,781</td>
<td>(107,413)</td>
<td>113,696</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indonesian Rupiah</td>
<td>2,337</td>
<td>50,418</td>
<td>75,442</td>
<td>—</td>
<td>(17,418)</td>
<td>110,779</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexican Peso</td>
<td>1,009</td>
<td>47,995</td>
<td>26,089</td>
<td>1,017</td>
<td>29,887</td>
<td>105,997</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkish Lira</td>
<td>607</td>
<td>75,051</td>
<td>17,219</td>
<td>267</td>
<td>3,976</td>
<td>97,120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polish Zloty</td>
<td>685</td>
<td>29,607</td>
<td>40,996</td>
<td>1,326</td>
<td>16,101</td>
<td>88,715</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russian Ruble (New)</td>
<td>562</td>
<td>21,052</td>
<td>62,891</td>
<td>—</td>
<td>(11,059)</td>
<td>73,446</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malaysian Ringgit</td>
<td>1,438</td>
<td>36,014</td>
<td>29,081</td>
<td>—</td>
<td>6,291</td>
<td>72,824</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Danish Krone</td>
<td>2,436</td>
<td>118,473</td>
<td>—</td>
<td>875</td>
<td>(63,282)</td>
<td>58,502</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colombian Peso</td>
<td>542</td>
<td>2,889</td>
<td>29,838</td>
<td>—</td>
<td>18,618</td>
<td>51,887</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peruvian Sol</td>
<td>176</td>
<td>55,302</td>
<td>—</td>
<td>—</td>
<td>(7,030)</td>
<td>48,448</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Koruna</td>
<td>899</td>
<td>1,939</td>
<td>1,180</td>
<td>—</td>
<td>35,543</td>
<td>39,561</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungarian Forint</td>
<td>360</td>
<td>11,379</td>
<td>29,103</td>
<td>—</td>
<td>(4,359)</td>
<td>36,483</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chinese Yuan Renminbi</td>
<td>547</td>
<td>72,490</td>
<td>—</td>
<td>—</td>
<td>(46,327)</td>
<td>26,710</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Israeli Shekel</td>
<td>42</td>
<td>43,125</td>
<td>701</td>
<td>2,620</td>
<td>(21,688)</td>
<td>24,800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chilean Peso</td>
<td>505</td>
<td>19,764</td>
<td>7,070</td>
<td>—</td>
<td>(5,330)</td>
<td>22,009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nigerian Naira</td>
<td>12,598</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>9,082</td>
<td>21,680</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Egyptian Pound</td>
<td>5,189</td>
<td>6,029</td>
<td>—</td>
<td>—</td>
<td>8,727</td>
<td>19,945</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philppines Peso</td>
<td>229</td>
<td>8,575</td>
<td>1,327</td>
<td>—</td>
<td>3,440</td>
<td>13,571</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dominican Republic Peso</td>
<td>—</td>
<td>11,983</td>
<td>—</td>
<td>—</td>
<td>11,983</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UAE Dirham</td>
<td>(159)</td>
<td>9,591</td>
<td>—</td>
<td>—</td>
<td>1,697</td>
<td>11,129</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Argentine Peso</td>
<td>537</td>
<td>6,552</td>
<td>—</td>
<td>—</td>
<td>719</td>
<td>7,808</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kazakhstan Tenge</td>
<td>—</td>
<td>6,370</td>
<td>—</td>
<td>—</td>
<td>331</td>
<td>6,701</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qatari Riyal</td>
<td>390</td>
<td>4,537</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>4,927</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uruguay Peso</td>
<td>—</td>
<td>3,534</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>3,534</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ukraine Hryvnia</td>
<td>748</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>1,180</td>
<td>1,928</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Romanian Lei</td>
<td>108</td>
<td>5,006</td>
<td>—</td>
<td>—</td>
<td>(4,437)</td>
<td>677</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sri Lanka Rupee</td>
<td>—</td>
<td>599</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>599</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chinese R Yuan HK</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>189</td>
<td>189</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moroccan Dirham</td>
<td>1</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saudi Arabian Riyal</td>
<td>—</td>
<td>(83)</td>
<td>—</td>
<td>—</td>
<td>(5,080)</td>
<td>(5,080)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singapore Dollar</td>
<td>2,834</td>
<td>199,276</td>
<td>—</td>
<td>—</td>
<td>(332,684)</td>
<td>(130,574)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norwegian Krone</td>
<td>2,761</td>
<td>102,505</td>
<td>—</td>
<td>362</td>
<td>(308,403)</td>
<td>(202,775)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$276,813</strong></td>
<td><strong>$10,537,556</strong></td>
<td><strong>$642,955</strong></td>
<td><strong>$771,932</strong></td>
<td><strong>$483,897</strong></td>
<td><strong>$2,170,141</strong></td>
<td><strong>$4,803,801</strong></td>
<td><strong>$10,079,493</strong></td>
</tr>
</tbody>
</table>

### Foreign Currency Exposures by Asset Class - Component Units

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Currency</th>
<th>Deposits</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Pound Sterling</td>
<td>$ 1,076</td>
</tr>
<tr>
<td>Euro Currency Unit</td>
<td>2,461</td>
</tr>
<tr>
<td>Chinese RMB</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$ 3,542</strong></td>
</tr>
</tbody>
</table>
Fair Value Measurements

Primary Government

GASB Statement No. 72, *Fair Value Measurement and Application*, requires disclosures to be made about fair value measurements, the level of fair value hierarchy, and valuation techniques. The fair value hierarchy is based on the valuation inputs used to measure the fair value of assets:

- Level 1 inputs are quoted prices in active markets for identical assets;
- Level 2 inputs are significant other observable inputs and may include quoted prices for similar assets in active markets, quoted prices for identical or similar assets in inactive markets, or model-driven valuations;
- Level 3 inputs are derived using valuation techniques that have significant unobservable inputs.

Investments that do not have a readily determinable fair value are excluded from the fair value hierarchy and instead are valued by using the net asset value (NAV) per share (or its equivalent). In instances where inputs used to measure fair value fall into different levels in the fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant in the valuation.

The following tables summarize recurring fair value measurements for the cash equivalents and investments reported by the primary government (excluding pension and other employee benefit trust funds) and the System (pension and other employee benefit trust funds) as of June 30, 2019.

### Fair Value Measurements - Primary Government

*(Excluding Pension and Other Employee Benefit Trust Funds)*

*(Dollars in Thousands)*

<table>
<thead>
<tr>
<th>Fair Value Measured Using Fair Value Hierarchy</th>
<th>Fair Value</th>
<th>Quoted Prices in Active Markets for Identical Assets</th>
<th>Significant Other Observable Inputs</th>
<th>Significant Unobservable Inputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt Securities (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U. S. Treasury and Agency Securities</td>
<td>$604,402</td>
<td>$526,960</td>
<td>$77,442</td>
<td>$—</td>
</tr>
<tr>
<td>Corporate Bonds and Notes</td>
<td>1,153,296</td>
<td>1,337</td>
<td>1,151,959</td>
<td>—</td>
</tr>
<tr>
<td>Supranational and Non-U.S. Government Bonds and Notes</td>
<td>229,035</td>
<td>—</td>
<td>229,035</td>
<td>—</td>
</tr>
<tr>
<td>Commercial Paper</td>
<td>2,140,836</td>
<td>—</td>
<td>2,140,836</td>
<td>—</td>
</tr>
<tr>
<td>Convertible Bonds and Notes</td>
<td>117,440</td>
<td>—</td>
<td>117,440</td>
<td>—</td>
</tr>
<tr>
<td>Negotiable Certificates of Deposit</td>
<td>2,698,309</td>
<td>—</td>
<td>2,698,309</td>
<td>—</td>
</tr>
<tr>
<td>Municipal Securities</td>
<td>19,225</td>
<td>2,901</td>
<td>16,219</td>
<td>105</td>
</tr>
<tr>
<td>Asset Backed Securities</td>
<td>299,176</td>
<td>359</td>
<td>298,817</td>
<td>—</td>
</tr>
<tr>
<td>Agency Mortgage Backed Securities</td>
<td>280,122</td>
<td>—</td>
<td>280,122</td>
<td>—</td>
</tr>
<tr>
<td>Agency Unsecured Bonds and Notes</td>
<td>2,182,363</td>
<td>8,941</td>
<td>2,173,422</td>
<td>—</td>
</tr>
<tr>
<td>Mutual and Money Market Funds (Includes SNAP)</td>
<td>3,638</td>
<td>3,638</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Fixed Income and Commingled Funds</td>
<td>823,442</td>
<td>823,442</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>International and Emerging Markets Funds</td>
<td>326,332</td>
<td>326,332</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total Debt Securities</td>
<td>10,877,616</td>
<td>1,693,910</td>
<td>9,183,691</td>
<td>105</td>
</tr>
</tbody>
</table>

| Equity Securities (2)                          |            |                                                     |                                   |                                |
| Common and Preferred Stocks                    | 474,237    | 467,646                                             | 6,590                            | 1                               |
| Foreign Currencies                             | 1,622      | 1,622                                               | —                                 | —                               |
| Equity Index and Pooled Funds                  | 83,509     | 83,499                                              | —                                 | 10                              |
| Index Funds                                    | 2,081,306  | 2,081,306                                           | —                                 | —                               |
| Real Estate                                    | 9,026      | 1,176                                               | 7,850                             | —                               |
| International and Emerging Markets Funds       | 867,940    | 867,940                                             | —                                 | —                               |
| Other Equity Securities                        | 73,369     | 73,369                                              | —                                 | —                               |
| Total Equity Securities                        | 3,591,009  | 3,576,558                                           | 6,590                            | 7,861                           |
| Total by Fair Value Level                      | 14,468,625 | 5,270,468                                           | $9,190,191                        | $7,966                          |

**Total Fair Value Established Using the Net Asset Value (NAV) (3)**  
1,123,373

**Total Fair Value**  
$15,591,998
(1) Debt securities are classified as follows:
• Level 1 - valued using unadjusted quoted prices in active markets for those securities.
• Level 2 - valued using a matrix pricing model and observable prices using dealer quotes for similar securities traded in active markets.

(2) Equity securities are classified as follows:
• Level 1 - valued using unadjusted quoted prices in active markets for those securities.
• Level 2 - valued using dealer quotes for similar securities traded in active markets.
• Level 3 - valued using independent appraisals.

(3) Investments reported at fair value established using the NAV were all part of the Virginia College Savings Plan’s (Virginia529) Prepaid529 and Invest529 programs. The following tables (dollars in thousands) summarizes Prepaid529 and Invest529’s investments measured at the NAV and related disclosures as of June 30, 2019. Additional information is available in the Virginia529 individually published financial statements, which may be obtained at www.virginia529.com.

Description of Prepaid529 Investments Measured at the NAV:

<table>
<thead>
<tr>
<th>Investments Measured at NAV</th>
<th>Fair Value</th>
<th>Unfunded Commitments</th>
<th>Redemption Frequency (if Currently Eligible)</th>
<th>Redemption Notice Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hedge Funds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blackstone - Hedge Fund of Funds</td>
<td>$137,873</td>
<td>$—</td>
<td>Semi-Annual</td>
<td>95 Days</td>
</tr>
<tr>
<td>Equity Real Estate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UBS Realty Investors</td>
<td>$51,406</td>
<td>—</td>
<td>Quarterly</td>
<td>60 Days</td>
</tr>
<tr>
<td>Private Debt &amp; Private Equity Funds of Funds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Golub Capital</td>
<td>21,000</td>
<td>14,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Advisors</td>
<td>35,537</td>
<td>8,883</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adams Street Partners</td>
<td>146,641</td>
<td>66,086</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LGT Capital Partners</td>
<td>4,268</td>
<td>6,480</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neuberger Berman</td>
<td>19,922</td>
<td>14,804</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aether Investment Partners</td>
<td>26,652</td>
<td>21,848</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common fund</td>
<td>18,381</td>
<td>2,670</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horseley Bridge Partners</td>
<td>1,296</td>
<td>18,552</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Investments Measured at the NAV</td>
<td>$1,006,360</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Hedge Funds** – This investment type includes one hedge fund. The Blackstone Partners Offshore Fund is diversified, multi-strategy hedge fund of funds. Underlying investment strategies include a range of asset classes and the funds are not restricted from participating in any market, strategy or investment. The fair value of investments in this type has been determined using the NAV per share of the investments.

- **Equity Real Estate** – This investment type includes one limited partnership. The UBS Trumbull Property Fund’s investment strategy is to invest primarily through direct equity-owned real estate assets. The fund also has flexibility to invest in joint venture and debt investments. Investments are generally acquired on an all-cash basis, however debt may be used where UBS determines leverage is prudent and is expected to enhance total return without undue risk. The fair values of investments in this type have been determined using the NAV per share of Virginia529’s ownership of the partnership.

- **Private Debt and Private Equity Funds of Funds** – This investment type includes private equity funds of funds managed by seven managers and one private debt fund. These investments cannot be redeemed from the fund. Capital is generally expected to be called during the initial 4 to 5 years and is expected to be returned through liquidations of underlying fund investments during the 3rd through 15th years. Secondaries funds of funds may have an accelerated capital call and return of capital profile. Virginia529 invests in multiple funds with three of its private equity investment managers and is also diversified by vintage year with respect to these investments. The fair values of investments in this type have been determined using the March 31, 2019 NAV of Virginia529’s ownership of the partnership, adjusted for cash flows (capital calls) through June 30, 2019.

- **Common Trust Funds & Other** – This investment type includes four common trust funds and one limited partnership. The fair value of investments in this type have been determined using the NAV per share of the investments.
Description of Invest529 Investments Measured at the NAV:

<table>
<thead>
<tr>
<th>Investments Measured at NAV</th>
<th>Fair Value</th>
<th>Unfunded Commitments</th>
<th>Redemption Frequency (if Currently Eligible)</th>
<th>Redemption Notice Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity Real Estate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UBS Realty Investors</td>
<td>$69,318</td>
<td>—</td>
<td>Quarterly</td>
<td>60 Days</td>
</tr>
<tr>
<td>Blackstone Property Partners</td>
<td>47,695</td>
<td>—</td>
<td>Quarterly</td>
<td>90 Days</td>
</tr>
<tr>
<td>Total Investments Measured at the NAV</td>
<td>$117,013</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Equity Real Estate** – This investment type includes two limited partnerships. The UBS Trumbull Property Fund’s investment strategy is to invest primarily through direct equity-owned real estate assets. The fund also has flexibility to invest in joint venture and debt investments. Investments are generally acquired on an all-cash basis, however debt may be used where UBS determines leverage is prudent and is expected to enhance total return without undue risk. Blackstone Property Partners is an open ended commingled fund seeking core plus real estate investments in the U.S. and Canada. The fair values of investments in this type have been determined using the NAV per share of Virginia529’s ownership of the partnership.

Fair Value Measurements
Primary Government - Virginia Retirement System
(Pension and Other Employee Benefit Trust Funds)
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Fair Value Measured Using Fair Value Hierarchy</th>
<th>Quoted Prices In Active Markets for Identical Assets (Level 1)</th>
<th>Significant Other Observable Inputs (Level 2)</th>
<th>Significant Unobservable Inputs (Level 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt Securities (1)</td>
<td>Fair Value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U. S. Treasury and Agency Securities</td>
<td>$4,102,838</td>
<td>$3,359,846</td>
<td>$742,992</td>
</tr>
<tr>
<td>Corporate Bonds and Notes</td>
<td>7,505,553</td>
<td>7,505,553</td>
<td>—</td>
</tr>
<tr>
<td>Collateralized Mortgage Obligations</td>
<td>415,354</td>
<td>415,354</td>
<td>—</td>
</tr>
<tr>
<td>Commercial Mortgages</td>
<td>441,271</td>
<td>441,271</td>
<td>—</td>
</tr>
<tr>
<td>Supranational and Non-U.S. Government Bonds and Notes</td>
<td>2,136,551</td>
<td>2,136,551</td>
<td>—</td>
</tr>
<tr>
<td>Mutual and Money Market Funds</td>
<td>168,196</td>
<td>168,196</td>
<td>—</td>
</tr>
<tr>
<td>Negotiable Certificates of Deposit</td>
<td>107,746</td>
<td>107,746</td>
<td>—</td>
</tr>
<tr>
<td>Municipal Securities</td>
<td>138,049</td>
<td>138,049</td>
<td>—</td>
</tr>
<tr>
<td>Asset Backed Securities</td>
<td>924,392</td>
<td>924,392</td>
<td>—</td>
</tr>
<tr>
<td>Agencies</td>
<td>3,540,542</td>
<td>3,540,542</td>
<td>—</td>
</tr>
<tr>
<td>Fixed Income and Commingled Funds</td>
<td>20,323</td>
<td>—</td>
<td>20,323</td>
</tr>
<tr>
<td>Fixed Income Derivatives</td>
<td>17,049</td>
<td>8,301</td>
<td>8,748</td>
</tr>
<tr>
<td>Total Debt Securities</td>
<td>19,517,864</td>
<td>3,536,343</td>
<td>15,961,198</td>
</tr>
</tbody>
</table>

| Equity Securities (2)                           | Fair Value                                                 |                                             |                                          |
| Common and Preferred Stocks                     | 24,697,438                                                 | 24,588,461                                  | 107,770                                  | 1,207                                    |
| Equity Index and Pooled Funds                   | 26,181                                                    | —                                            | 26,181                                   | —                                        |
| Real Assets                                     | 823,559                                                    | —                                            | 823,559                                   | —                                        |
| Equity Futures and Swaps                        | 25,545                                                    | 17,896                                      | 7,649                                    | —                                        |
| Private Equity                                  | 4,143                                                     | —                                            | 4,143                                    | —                                        |
| Total Equity Securities                         | 25,576,914                                                 | 24,606,357                                  | 115,419                                  | 855,138                                  |
| Total by Fair Value Level                       | 45,094,778                                                 | $28,142,700                                  | $16,076,617                               | $875,461                                  |

Total Fair Value Established Using the Net Asset Value (NAV) (3) 37,036,490
Total Fair Value 82,151,258

(1) Debt securities are classified as follows:
- Level 1 - valued using unadjusted quoted prices in active markets for those securities.
- Level 2 - valued using a proprietary matrix pricing technique. This pricing technique defines a primary source and secondary sources to be used if the primary pricing source does not provide a value. Typically, these securities are valued using bid evaluations. The valuation techniques may include market participants’ assumptions, quoted prices for similar assets, benchmark yield curves, market corroborated inputs, and other data inputs.
- Level 3 - valued using proprietary information.
(2) Equity securities are classified as follows:

- Level 1 - valued using unadjusted quoted prices in active markets for those securities.
- Level 2 - valued using quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; or model-driven valuations in which all significant inputs are observable.
- Level 3 - valued using proprietary information. When observable inputs are not available, this results in using one or more valuation techniques, such as the market approach, the income approach, and/or the cost approach, for which sufficient and reliable data is available. Within this level, the use of the market approach generally consists of using comparable market transactions or other data, while the use of the income approach generally consists of the net present value of estimated future cash flows. The cost approach is often based on the amount that would currently be required to replace an asset with one of comparable utility.

(3) The following table (dollars in thousands) summarizes the System’s investments measured at the NAV per share (or its equivalent) and related disclosures as of June 30, 2019. It excludes $537,987 (dollars in thousands) related to Defined Contribution Plan investments for which the System has limited administrative and investment responsibility. Additional information is available in the System’s separately issued financial statements, which may be obtained at www.varetire.org.

Description of Investments Measured at the NAV:

<table>
<thead>
<tr>
<th>Description of Investments Measured at the NAV:</th>
<th>Fair Value</th>
<th>Unfunded Commitments</th>
<th>Redemption Frequency (if Currently Eligible)</th>
<th>Redemption Notice Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hedge funds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity long/short funds</td>
<td>$ 4,495,242</td>
<td>$ —</td>
<td>Monthly, quarterly, semi-annually</td>
<td>45-90 days</td>
</tr>
<tr>
<td>Equity long only funds</td>
<td>1,774,781</td>
<td>—</td>
<td>Daily, quarterly, annually</td>
<td>14-90 days</td>
</tr>
<tr>
<td>Credit funds</td>
<td>765,672</td>
<td>—</td>
<td>Quarterly, annually</td>
<td>45-90 days</td>
</tr>
<tr>
<td>Multi-strategy funds</td>
<td>1,800,099</td>
<td>—</td>
<td>Monthly, quarterly, semi-annually</td>
<td>30-90 days</td>
</tr>
<tr>
<td>Total hedge funds</td>
<td>8,835,794</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit strategies funds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank loan and direct lending funds</td>
<td>1,846,954</td>
<td>1,397,660</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distressed debt funds</td>
<td>695,018</td>
<td>636,531</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mezzanine debt funds</td>
<td>429,050</td>
<td>465,024</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-strategy funds</td>
<td>1,085,684</td>
<td>1,596,625</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunistic funds</td>
<td>1,501,383</td>
<td>232,487</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total credit strategies funds</td>
<td>5,658,089</td>
<td>4,327,327</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private equity funds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buyout funds</td>
<td>5,023,821</td>
<td>2,590,662</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy funds</td>
<td>701,245</td>
<td>256,246</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Growth funds</td>
<td>1,055,431</td>
<td>751,653</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International buyout funds</td>
<td>1,200,400</td>
<td>810,058</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special situations funds</td>
<td>935,717</td>
<td>862,472</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subordinated debt funds</td>
<td>76,655</td>
<td>265,319</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turnaround funds</td>
<td>469,383</td>
<td>193,567</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Venture capital funds</td>
<td>58,755</td>
<td>15,754</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total private equity funds</td>
<td>9,521,407</td>
<td>5,744,731</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity international commingled funds</td>
<td>2,080,203</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed-income commingled funds</td>
<td>1,322,090</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real estate and real asset funds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infrastructure funds</td>
<td>1,750,510</td>
<td>590,367</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural resources funds</td>
<td>1,328,116</td>
<td>551,870</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private investment real estate funds</td>
<td>5,761,136</td>
<td>822,172</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private real estate investment trusts</td>
<td>213,878</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total real estate and real asset funds</td>
<td>9,053,640</td>
<td>1,964,409</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U. S. Equity commingled funds</td>
<td>127,270</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total investments measured at the NAV</td>
<td>$ 36,498,493</td>
<td>$ 12,036,467</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Equity Long/Short Hedge Funds** – This type included investments in eleven hedge funds as of June 30, 2019, which invest in global long and short equity positions. Management of each hedge fund has the ability to invest from value to growth strategies, from small to large capitalization stocks and may vary net exposure considerably. The fair values of the investments in this type have been determined using the NAV per share of the investments. Investments representing approximately 66.0 percent of the value of the investments in this type of fund cannot be redeemed because the investments include restrictions that do not allow redemption in the first 12 to 60 months after acquisition. The remaining restriction period for these investments was less than 12 months as of June 30, 2019.
• **Equity Long-Only Hedge Funds** – This type included an investment in four hedge funds as of June 30, 2019, which invest in global long-only equity positions. These hedge funds are generally fully invested and only very occasionally may take short positions for hedging purposes. The fair value of the investment in this type has been determined using the NAV per share of the investments. Investments representing approximately 67.0 percent of the value of the investments in this type of fund cannot be redeemed because the investments include restrictions that do not allow redemption in the first 12 to 48 months after acquisition. The remaining restriction period for these investments was less than 12 months as of June 30, 2019.

• **Credit Hedge Funds** – This type included investments in two hedge funds as of June 30, 2019, which invest in event-driven, distressed and special situation credit opportunities. The fair values of the investments in this type have been determined using the NAV per share of the investments. Investments representing approximately 12.0 percent of the value of the investments in this type of fund cannot be redeemed because the investments include restrictions that do not allow redemption in the next 12 months. The restriction period for redemptions in regard to 88.0 percent of investments in this type was less than 12 months as of June 30, 2019.

• **Multi-Strategy Hedge Funds** – This type included investments in six hedge funds as of June 30, 2019, which invest in multiple asset classes, combining exposure to balance risks. Such exposure can include traditional and alternative investments. The fair values of the investments in this type have been determined using the NAV per share of the investments. Investments representing approximately 33.0 percent of the value of the investments in this type of fund cannot be redeemed because the investments include restrictions that do not allow redemption in the first 60 months after acquisition. The remaining restriction period for these investments was 1 to 12 months as of June 30, 2019.

• **Credit Strategies Funds** – This type consists of many fund categories, including bank loan and direct lending funds, distressed debt funds, mezzanine debt funds, multi-strategy funds, and opportunistic funds. The fair value of the investments in these funds have been determined using the NAV per share of the investments. The nature of the investments in this type is that distributions are received through the liquidation of the underlying assets in the fund. If these investments were held, it is expected that the underlying assets in the fund would be liquidated over 3 to 5 years.

• **Private Equity Funds** – This type consists of many fund categories including Venture Capital, Buyout, Subordinated Debt, Growth Capital, Turnaround, Energy and Special Situations. The fair value of the investments in these funds have been determined using the NAV per share of the investments. The nature of the investments involves receiving distributions through liquidation of the underlying fund assets. It is expected that hold periods for the underlying fund assets will range from 3 to 8 years.

• **Equity International Commingled Funds** – This type includes investments in ten institutional investment funds as of June 30, 2019, which invest in international equities. These funds employ a variety of investment strategies in global developed and emerging markets. The fair values of the investments in these funds have been determined using the NAV per share of the investments. Redemptions can be made from these funds, given the appropriate notice, any regular trading day on the NYSE.

• **Fixed Income Commingled Funds** – This type consists of nine institutional investment funds that invest in U.S. and multi-national fixed income markets. The fair values of the investments in these funds have been determined using the NAV per share of the investments.

• **U.S. Equity Commingled Funds** - This type includes investments in five institutional investment funds as of June 30, 2019, which invest in domestic equities. These funds employ a variety of investment strategies in small-, mid-, and large-cap U.S. stocks. The fair values of the investments in these funds have been determined using the NAV per share of the investments. Redemptions can be made from these funds, given the appropriate notice, any regular trading day on the NYSE.

• **Real Assets** – This type includes investments in many fund categories including Private Investment Real Estate, Private Real Estate Investment Trusts, Infrastructure and Natural Resources. The fair value of the investments in these funds have been determined using the NAV per share of the investments. The nature of the investments in this type is that distributions are received through income as well as the liquidation of the underlying assets in the fund. If these investments were held, it is expected that the underlying assets of the funds would be liquidated over 1 to 14 years.
Component Units

The following table summarizes fair value measurements for the cash equivalents and investments reported by the component units as of June 30, 2019. The table excludes cash equivalents and investments measured at fair value by the foundations that follow FASB standards.

### Fair Value Measurements - Component Units

**Dollars in Thousands**

<table>
<thead>
<tr>
<th>Fair Value Measured Using Fair Value Hierarchy</th>
<th>Fair Value</th>
<th>Quoted Prices in Active Markets for Identical Assets (Level 1)</th>
<th>Significant Other Observable Inputs (Level 2)</th>
<th>Significant Unobservable Inputs (Level 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Debt Securities (1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U. S. Treasury and Agency Securities</td>
<td>$517,859</td>
<td>$341,898</td>
<td>$175,961</td>
<td>—</td>
</tr>
<tr>
<td>Corporate Bonds and Notes</td>
<td>499,535</td>
<td>30,361</td>
<td>469,174</td>
<td>—</td>
</tr>
<tr>
<td>Supranational and Non-U.S. Government Bonds and Notes</td>
<td>2,478</td>
<td>2,478</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Commercial Paper</td>
<td>25,595</td>
<td>5,847</td>
<td>19,748</td>
<td>—</td>
</tr>
<tr>
<td>Negotiable Certificates of Deposit</td>
<td>63,246</td>
<td>17,320</td>
<td>45,926</td>
<td>—</td>
</tr>
<tr>
<td>Repurchase Agreements</td>
<td>37,650</td>
<td>—</td>
<td>37,650</td>
<td>—</td>
</tr>
<tr>
<td>Municipal Securities</td>
<td>201,967</td>
<td>284</td>
<td>201,683</td>
<td>—</td>
</tr>
<tr>
<td>Asset-Backed Securities</td>
<td>284,860</td>
<td>7,660</td>
<td>277,200</td>
<td>—</td>
</tr>
<tr>
<td>Agency Mortgage-Backed Securities</td>
<td>762,910</td>
<td>31,863</td>
<td>731,047</td>
<td>—</td>
</tr>
<tr>
<td>Agency Unsecured Bonds and Notes</td>
<td>247,667</td>
<td>55,986</td>
<td>191,681</td>
<td>—</td>
</tr>
<tr>
<td>Mutual and Money Market Funds</td>
<td>331,579</td>
<td>328,964</td>
<td>2,615</td>
<td>—</td>
</tr>
<tr>
<td>Fixed Income and Commingled Funds</td>
<td>36,476</td>
<td>36,476</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Other Debt Securities</td>
<td>92,705</td>
<td>92,291</td>
<td>414</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total Debt Securities</strong></td>
<td>3,104,527</td>
<td>951,428</td>
<td>2,153,099</td>
<td>—</td>
</tr>
<tr>
<td><strong>Equity Securities (2)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common and Preferred Stocks</td>
<td>43,650</td>
<td>43,650</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Equity Index and Pooled Funds</td>
<td>163,593</td>
<td>163,593</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Index Funds</td>
<td>9,580</td>
<td>9,580</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Real Estate</td>
<td>3,074</td>
<td>3,040</td>
<td>34</td>
<td>—</td>
</tr>
<tr>
<td><strong>Other Equity Securities</strong></td>
<td>3,921</td>
<td>818</td>
<td>3,295</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total Equity Securities</strong></td>
<td>223,818</td>
<td>220,481</td>
<td>3,295</td>
<td>42</td>
</tr>
<tr>
<td><strong>Total by Fair Value Level</strong></td>
<td>3,328,345</td>
<td>1,171,909</td>
<td>2,156,394</td>
<td>42</td>
</tr>
<tr>
<td><strong>Fair Value Established Using the Net Asset Value (NAV) (3)</strong></td>
<td>87,794</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Income and Commingled Funds</td>
<td>20,343</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Debt Securities</td>
<td>101,122</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Index Funds</td>
<td>6,952</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real Estate</td>
<td>960</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other Equity Securities</strong></td>
<td>1,197,419</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Fair Value Established Using the NAV</strong></td>
<td>1,414,590</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Fair Value</strong></td>
<td>4,742,935</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Debt securities are classified as follows:
   - Level 1 - valued using unadjusted quoted prices in active markets for those securities.
   - Level 2 - valued based on quoted prices for similar securities in active markets or quoted prices for identical or similar securities in markets that are not active.

2. Equity securities are classified as follows:
   - Level 1 - valued using unadjusted quoted prices in active markets for those securities.
   - Level 2 - valued using significant other observable inputs.
   - Level 3 - valued using unobservable inputs and may include assumptions of management.

3. The following nonmajor component units reported investments at fair value established using the NAV: Old Dominion University, Virginia Commonwealth University (VCU), Virginia Commonwealth University Health System Authority (blended component unit of VCU), College of William and Mary, Virginia Military Institute, Virginia State University, Virginia Biotechnology Research Partnership Authority, Virginia Outdoors Foundation, and Virginia Polytechnic Institute and State University. Additional information is available in the separately issued financial statements.
Securities Lending

The State Treasury’s securities lending program is managed by Deutsche Bank AG, New York (Deutsche Bank), under a contract dated March 28, 2014. The enabling legislation for the securities lending program is Section 2.2-4506 of the Code of Virginia. No violations of legal or contractual provisions were noted during the year.

All securities lending loans are on an open-ended or one-day basis and may be terminated by the State Treasury with a 24-hour notice or at term loans with the right of substitution. While all securities may be recalled on a daily basis, securities are often on loan for much longer periods. Generally, cash reinvestments security maturities do not match the maturities of loans. Per the contract with Deutsche Bank, all cash collateral reinvestment securities attributable to loans made on the Commonwealth’s behalf shall be maintained by Deutsche Bank, and the State Treasury cannot pledge or sell such collateral absent a default.

The State Treasury’s contract with Deutsche Bank provides for loss indemnification against insolvency default with respect to lending transactions and in the case of reverse transactions (Repurchase Agreements) as defined in the applicable Agency Securities Lending and Repurchase Agreement. In March, 2018 Deutsche Bank announced it put in place a custom insurance solution written by a (AA-rated by S&P) specialty casualty insurer that backstops Deutsche Bank’s indemnification obligation. Additionally, Deutsche Bank AG is liable for any losses experienced from reinvestment of cash collateral in investments not authorized by the provisions of the investment guidelines for the Commonwealth of Virginia agreed upon by both parties and made a part of the Agency Securities Lending and Repurchase Agreement. There were no realized losses resulting from default during this reporting period.

When securities are loaned, the collateral received is at least 100.0 percent of fair value of the securities loaned and must be maintained at 100.0 percent or greater. There are no stated restrictions on the amount of securities that may be loaned, but the basic composition of the general account portfolio effectively restricts the maximum percentage of the portfolio that may be loaned. During the last fiscal year, approximately 9.7 percent of the general account securities were on loan.

During the past year, a combination of U.S. Treasury, agency, agency mortgage and corporate securities have been loaned, with the majority of the loaned securities being U.S. Treasury and agency securities. As of June 30, 2019, all collateral received was in the form of cash.

Securities loaned for the State Treasurer’s cash collateral reinvestment pool, which consisted of 92.6 percent general account funds and 7.4 percent Virginia Lottery funds as of June 30, 2019, had a carrying value of $734.9 million and a fair value of $776.0 million. The fair value of the collateral received was $784.2 million providing for coverage of 101.1 percent. At year-end, the State Treasury’s securities lending program had no credit risk exposure to borrowers because the amounts it owed the borrowers exceeded the amounts the borrowers owed Treasury’s securities lending program. All securities are marked to market daily. The carrying value of the cash collateral reinvestment pool received was $785.1 million and the cost of the investments purchased with the cash collateral was $785.1 million. As of June 30, 2019, the State Treasurer’s cash collateral reinvestment pool had an unrealized gain of $863,000, and is recorded in the General Fund as stated in Note 1.FF. This amount is included in the total State Treasurer’s Portfolio discussed earlier in this note.

Cash collateral reinvestment guidelines were amended effective April 16, 2014. Approved investment instruments include Indemnified Repurchase Agreements marked to market daily and preapproved Government Money Market Funds. Term repurchase agreements are limited to 93 days. As of June 30, 2019, 100.0 percent of cash collateral reinvestments were in indemnified repurchase agreements.

As of June 30, 2019, the cash collateral reinvestment portfolio had a weighted average maturity to reset date of one day. Using the expected maturity date, the weighted average maturity was 26 days and using the final maturity date, which assumes no pay downs on any asset-backed or mortgage-backed securities, the weighted average maturity was 26 days.

As of June 30, 2019, the cash collateral reinvestment portfolio was in compliance with the State Treasury’s current cash collateral reinvestment guidelines.

Under authorization of the Board, the System lends its fixed income and equity securities to various broker-dealers on a temporary basis. This program is administered through an agreement with the System’s custodial agent bank. All security loan agreements are collateralized by cash, securities, or an irrevocable letter of credit issued by a major bank, and have a fair value equal to at least 102.0 percent of the fair value for domestic securities and 105.0 percent for international securities. Securities received as collateral cannot be pledged or sold by the System unless the borrower defaults. Contracts require the lending agents to indemnify the System if the borrowers fail to return the securities lent and related distributions and if the collateral is inadequate to replace the securities lent. All securities loans can be terminated on demand by either the System or the borrowers. The majority of loans are open loans, meaning the rebate is set daily. This results in a maturity of one or two days on average, although securities are often on loan for longer periods. The maturity of loans generally does not match the maturity of collateral investments, which averages 18 days. At year-end, the System had no credit risk exposure to borrowers because the amounts it owes the borrowers exceeded the amounts the borrowers owe the System. All securities are marked to market daily and carried at fair value. The fair value of securities on loan as of June 30, 2019, was $8.6 billion. The June 30, 2019, balance was composed of U.S. Government and agency securities of $2.7 billion, corporate and other bonds of $1.2 billion, common and preferred stocks of $4.6 billion and supranational and non-U.S. government bonds of $113.0 million. The value of collateral (cash and non-cash) as of June 30, 2019, was $9.0 billion.

As of June 30, 2019, the invested cash collateral had a cost of $4.7 billion and was composed of negotiable certificates of deposit of $60.4 million, floating rate notes of $3.1 billion, commercial paper of $92.1 million, and repurchase agreements of $1.4 billion.
The following schedule (dollars in thousands) details the accounts, loans, local school bonds, interest, taxes, prepaid tuition contributions, security transactions, and other receivables presented in the major funds, aggregated nonmajor funds by type, internal service funds, fiduciary funds, major component units, and aggregated nonmajor component units, as of June 30, 2019.

<table>
<thead>
<tr>
<th>Primary Government:</th>
<th>Accounts Receivable</th>
<th>Loans / Mortgage Receivable</th>
<th>Local School Bonds Receivable</th>
<th>Interest Receivable</th>
<th>Taxes Receivable</th>
</tr>
</thead>
<tbody>
<tr>
<td>General (1)</td>
<td>$ 1,237,559</td>
<td>$ 191</td>
<td>—</td>
<td>$ 443,306</td>
<td>$ 2,099,223</td>
</tr>
<tr>
<td>Major Special Revenue Funds:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commonwealth Transportation (2)</td>
<td>170,488</td>
<td>189,750</td>
<td>—</td>
<td>451</td>
<td>205,240</td>
</tr>
<tr>
<td>Federal Trust</td>
<td>1,589,810</td>
<td>787</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literary</td>
<td>298,067</td>
<td>98,829</td>
<td>—</td>
<td>45,608</td>
<td></td>
</tr>
<tr>
<td>Nonmajor Governmental Funds (2)</td>
<td>234,889</td>
<td>7,379</td>
<td>—</td>
<td>21,054</td>
<td>8,436</td>
</tr>
<tr>
<td>Major Enterprise Funds:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia Lottery</td>
<td>72,486</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Virginia College Savings Plan</td>
<td>12,370</td>
<td>—</td>
<td>—</td>
<td>5,768</td>
<td></td>
</tr>
<tr>
<td>Unemployment Compensation</td>
<td>96,798</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Nonmajor Enterprise Funds</td>
<td>59,698</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Internal Service Funds</td>
<td>35,692</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Private Purpose Trust Funds</td>
<td>316</td>
<td>—</td>
<td>—</td>
<td>3,935</td>
<td></td>
</tr>
<tr>
<td>Pension and Other Employee Benefit Trust Funds (3)</td>
<td>249,372</td>
<td>—</td>
<td>—</td>
<td>276,679</td>
<td></td>
</tr>
<tr>
<td>Investment Trust Fund</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>9,474</td>
<td></td>
</tr>
<tr>
<td>Agency Funds</td>
<td>674</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>116,463</td>
</tr>
<tr>
<td><strong>Total Primary Government (4)</strong></td>
<td><strong>$ 4,058,219</strong></td>
<td><strong>$ 296,936</strong></td>
<td><strong>—</strong></td>
<td><strong>$ 806,275</strong></td>
<td><strong>$ 2,429,362</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Discrete Component Units:</th>
<th>Accounts Receivable</th>
<th>Loans / Mortgage Receivable</th>
<th>Local School Bonds Receivable</th>
<th>Interest Receivable</th>
<th>Taxes Receivable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virginia Housing Development Authority (5)</td>
<td>$</td>
<td>$ 5,807,362</td>
<td>—</td>
<td>$ 26,587</td>
<td>—</td>
</tr>
<tr>
<td>Virginia Public School Authority (6)</td>
<td>—</td>
<td>—</td>
<td>3,293,365</td>
<td>58,023</td>
<td>—</td>
</tr>
<tr>
<td>Virginia Resources Authority</td>
<td>—</td>
<td>4,307,341</td>
<td>—</td>
<td>29,777</td>
<td></td>
</tr>
<tr>
<td>Virginia College Building Authority</td>
<td>—</td>
<td>—</td>
<td>24,053</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Nonmajor Component Units (7)</td>
<td>1,908,400</td>
<td>146,308</td>
<td>—</td>
<td>8,659</td>
<td>7,058</td>
</tr>
<tr>
<td><strong>Total Component Units</strong></td>
<td><strong>$ 1,908,400</strong></td>
<td><strong>$ 10,261,011</strong></td>
<td><strong>$ 3,293,365</strong></td>
<td><strong>$ 147,099</strong></td>
<td><strong>$ 7,058</strong></td>
</tr>
</tbody>
</table>

Note (1): The General Fund (major) reports pending investment transactions of $41,566 (dollars in thousands) as Other Receivables.

Note (2): The loans receivable in the Commonwealth Transportation Fund (major) includes $156.0 million from the Virginia Infrastructure Bank as discussed in Note 22.D. In the nonmajor governmental funds, it represents the amounts to be received for current debt service requirements. The amount to be received for long-term debt service requirements of $76.5 million is included in the government-wide statements but excluded from the above amounts.

Note (3): In the Pension and Other Employee Benefit Trust Funds, Interest Receivable of $276,679 (dollars in thousands) also includes dividends receivable. Additionally, Other Receivables of $130,475 (dollars in thousands) are made up of $98,893 (dollars in thousands) in pending investment transactions, which includes $79,003 (dollars in thousands) in futures margins receivable, $17,897 (dollars in thousands) in futures contracts receivable, and $1,993 (dollars in thousands) in securities lending; and $31,582 (dollars in thousands) in other receivables related to benefit plans.

Note (4): Fiduciary net receivables in the amount of $1,728,734 (dollars in thousands) are not included in the Government-wide Statement of Net Position.

Note (5): The Virginia Housing Development Authority (major component unit) reports $5,470,456 (dollars in thousands) as Restricted Loans/Mortgage Receivable, $24,153 (dollars in thousands) as Restricted Interest Receivable, and $18,869 as Restricted Other Receivables.

Note (6): The Virginia Public School Authority (major component unit) reports $3,293,365 (dollars in thousands) as Local School Bonds Receivable. This amount will be used to repay the Authority’s bonds.

Note (7): Other Receivables of the nonmajor component units are primarily comprised of pledges receivable of $115,744 (dollars in thousands) reported by the University of Virginia; premium receivables of $165,327 (dollars in thousands) and third-party settlements and non-patient receivables of $127,022 (dollars in thousands) reported by Virginia Commonwealth University Health System Authority (blended component unit of Virginia Commonwealth University); $60,025 (dollars in thousands) reported by foundations of the higher education institutions representing FASB reporting entities defined in Note 1.B.; and $82,476 (dollars in thousands) reported by the Virginia Port Authority, $13,255 (dollars in thousands) reported by the Virginia Biotechnology Research Partnership Authority.
<table>
<thead>
<tr>
<th></th>
<th>Prepaid Tuition Contributions Receivable</th>
<th>Security Transactions</th>
<th>Other Receivables</th>
<th>Allowance for Doubtful Accounts</th>
<th>Net Accounts Receivable</th>
<th>Amounts to be Collected Greater than One Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>41,566</td>
<td>(1,710,260)</td>
<td>2,111,585</td>
<td>514,314</td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(40,988)</td>
<td>524,941</td>
<td>190,757</td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(4,871)</td>
<td>1,585,726</td>
<td>22,079</td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(307,230)</td>
<td>135,274</td>
<td>87,443</td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>87</td>
<td>(95,885)</td>
<td>175,960</td>
<td>571</td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>72,486</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>209,669</td>
<td>—</td>
<td>4,541</td>
<td>—</td>
<td>232,348</td>
<td>159,635</td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(19,159)</td>
<td>77,639</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(1,740)</td>
<td>57,958</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(156)</td>
<td>35,536</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>1,122</td>
<td>—</td>
<td>5,373</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>995,675</td>
<td>130,475</td>
<td>—</td>
<td>1,652,201</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>9,474</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(55,451)</td>
<td>61,686</td>
<td>10,290</td>
<td></td>
</tr>
<tr>
<td>$</td>
<td>209,669</td>
<td>$ 995,675</td>
<td>$ 177,791</td>
<td>$ (2,235,740)</td>
<td>$ 6,738,187</td>
<td>$ 985,089</td>
</tr>
</tbody>
</table>

|                     | $                                      | $                     | $                 | $                              | $                     | $                                           |
| —                   | $                                     | —                     | 19,319            | (178,642)                      | 5,674,626             | $ 5,446,197                                 |
| —                   | —                                     | —                     | 3,351,388         | 3,140,991                      |
| —                   | —                                     | 6,559                 | (686)             | 4,342,991                      | 4,023,694             |
| —                   | —                                     | —                     | 24,053            | —                              |
| —                   | —                                     | 581,432               | (858,516)         | 1,793,341                      | 260,575               |
| $                   | —                                     | $ 607,310             | $ (1,037,844)     | $ 15,186,399                   | $ 12,871,457          |
10. CONTRIBUTIONS RECEIVABLE, NET

The following schedule details the contributions receivable for foundations(1) included with the nonmajor component units, as of June 30, 2019. The major component units reported no contributions receivable for fiscal year 2019.

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Discrete Component Units:</th>
<th>Due in Less Than One Year</th>
<th>Due Between One and Five Years</th>
<th>Due in More Than Five Years</th>
<th>Subtotal</th>
<th>Present Value Discount (2)</th>
<th>Allowance for Doubtful Accounts</th>
<th>Contributions Receivable, Net</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonmajor Component Units</td>
<td>$ 229,453</td>
<td>$ 342,394</td>
<td>$ 155,671</td>
<td>$ 727,518</td>
<td>(67,579)</td>
<td>(28,851)</td>
<td>$ 631,088</td>
</tr>
<tr>
<td>Total Component Units</td>
<td>$ 229,453</td>
<td>$ 342,394</td>
<td>$ 155,671</td>
<td>$ 727,518</td>
<td>(67,579)</td>
<td>(28,851)</td>
<td>$ 631,088</td>
</tr>
</tbody>
</table>

Note (1): Foundations represent FASB reporting entities defined in Note 1.B.
Note (2): The discount rate used to determine present value ranges from 0.1 percent to 7.0 percent.

11. INTERFUND AND INTER-ENTITY ASSETS / LIABILITIES

Due from/to Other Funds

Due from Other Funds are amounts to be received from one fund by another fund for goods sold or services rendered. Due to Other Funds are amounts owed by one fund to another fund for goods purchased or services obtained.

The following line items are included in the category “Due from Other Funds”:

• Due from Other Funds
• Due from Internal Parties (Governmental Funds and Business-type Activities)
• Due from External Parties (Fiduciary Funds)

The following line items are included in the category “Due to Other Funds”:

• Due to Other Funds
• Due to Internal Parties (Governmental Funds and Business-type Activities)
• Due to External Parties (Fiduciary Funds)

The following schedule shows the Due from/to Other Funds as of June 30, 2019.
## Schedule of Due from/to Other Funds

### June 30, 2019

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Due From</th>
<th>Amount</th>
<th>Due To</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Government</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Fund</td>
<td>$44,048</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Major Special Revenue Funds:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commonwealth Transportation</td>
<td>$2,044</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal Trust</td>
<td>$349</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonmajor Governmental Funds</td>
<td>$51</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Major Enterprise Funds:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia Lottery</td>
<td>$26,868</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonmajor Enterprise Funds</td>
<td>$13,484</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal Service Funds</td>
<td>$1,252</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Federal Trust</strong></td>
<td>349</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nonmajor Governmental Funds</strong></td>
<td>51</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Major Special Revenue Funds:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commonwealth Transportation</td>
<td>64,838</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal Trust</td>
<td>171</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Major Enterprise Funds:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment Compensation</td>
<td>168</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Literary</strong></td>
<td>2,420</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nonmajor Governmental Funds</strong></td>
<td>64,838</td>
<td></td>
<td>1,103</td>
</tr>
<tr>
<td><strong>Major Special Revenue Funds:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commonwealth Transportation</td>
<td>44,231</td>
<td></td>
<td>1,642</td>
</tr>
<tr>
<td>Federal Trust</td>
<td>1,642</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Major Enterprise Funds:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment Compensation</td>
<td>150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonmajor Enterprise Funds</td>
<td>709</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal Service Funds</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nonmajor Enterprise Funds</strong></td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Major Special Revenue Funds:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commonwealth Transportation</td>
<td>44,231</td>
<td></td>
<td>1,642</td>
</tr>
<tr>
<td>Federal Trust</td>
<td>1,642</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Major Enterprise Funds:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment Compensation</td>
<td>150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonmajor Enterprise Funds</td>
<td>709</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal Service Funds</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Internal Service Funds</strong></td>
<td>70,474</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Major Special Revenue Funds:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commonwealth Transportation</td>
<td>14,991</td>
<td></td>
<td>7,556</td>
</tr>
<tr>
<td>Federal Trust</td>
<td>7,556</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonmajor Governmental Funds</td>
<td>4,498</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Major Enterprise Funds:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia Lottery</td>
<td>215</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia College Savings Plan</td>
<td>92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonmajor Enterprise Funds</td>
<td>3,904</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal Service Funds</td>
<td>963</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pension and Other Employee Benefit Trust Funds</strong></td>
<td>4,014</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Investment Trust Funds</strong></td>
<td>10,453</td>
<td></td>
<td>10,453</td>
</tr>
<tr>
<td><strong>Total Primary Government</strong></td>
<td>$246,092</td>
<td></td>
<td>$246,092</td>
</tr>
</tbody>
</table>
## Schedule of Due from/to Internal/External Parties

### June 30, 2019

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Due From</th>
<th>Amount</th>
<th>Due To</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Government</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Fund</td>
<td>$3,773</td>
<td>Investment Trust Funds</td>
<td>$2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Agency Funds</td>
<td>3,771</td>
</tr>
<tr>
<td>Major Special Revenue Funds:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal Trust</td>
<td>$21,537</td>
<td>Pension and Other Employee Benefit Trust Funds</td>
<td>21,537</td>
</tr>
<tr>
<td>Nonmajor Governmental Funds</td>
<td>$40,726</td>
<td>Pension and Other Employee Benefit Trust Funds</td>
<td>40,481</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Agency Funds</td>
<td>245</td>
</tr>
<tr>
<td>Internal Service Funds</td>
<td>247</td>
<td>Pension and Other Employee Benefit Trust Funds</td>
<td>247</td>
</tr>
<tr>
<td>Pension and Other Employee Benefit Trust Funds</td>
<td>$30,398</td>
<td>General Fund</td>
<td>19,085</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Major Special Revenue Funds:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Commonwealth Transportation</td>
<td>5,156</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Federal Trust</td>
<td>2,421</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nonmajor Governmental Funds</td>
<td>2,317</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Major Enterprise Funds:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Virginia Lottery</td>
<td>194</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Virginia College Savings Plan</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nonmajor Enterprise Funds</td>
<td>711</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Internal Service Funds</td>
<td>431</td>
</tr>
<tr>
<td><strong>Total Primary Government</strong></td>
<td><strong>$96,681</strong></td>
<td><strong>Total Primary Government</strong></td>
<td><strong>$96,681</strong></td>
</tr>
</tbody>
</table>

### Interfund Receivables/Payables

Interfund Receivables/Payables are loans made by one fund to another.

The following schedule shows the Interfund Receivables/Payables for the primary government as of June 30, 2019. There were no Interfund Receivables/Payables for the component units as of June 30, 2019.

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Receivable From</th>
<th>Amount</th>
<th>Payable To</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Government</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonmajor Government Funds</td>
<td>$271,152</td>
<td>General Fund</td>
<td>$2,535</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Major Special Revenue Funds:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Commonwealth Transportation</td>
<td>3,401</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Federal Trust</td>
<td>25,619</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nonmajor Governmental Funds</td>
<td>44,995</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Internal Service Funds</td>
<td>194,602</td>
</tr>
<tr>
<td><strong>Total Primary Government</strong></td>
<td><strong>$271,152</strong></td>
<td><strong>Total Primary Government</strong></td>
<td><strong>$271,152</strong></td>
</tr>
</tbody>
</table>
Due from/to Primary Government and Component Units

Included in this category is activity between the Commonwealth and its component units, as well as activity between component units.

A due from primary government amount that is due from the Federal Trust Fund (major special revenue) to the Virginia College Building Authority (major component unit) of $3.4 million is for interest on Build America Bonds (BABs).

A $14.4 million due from primary government amount that is due from the General Fund (major governmental) to the higher education institutions (nonmajor component units) is for payments awaiting disbursements and appropriations available for capital projects and other programs. The General Fund reports $392,510 in the fund financial statements and an additional $14.0 million in the government-wide financial statements.

A $27,402 due from primary government amount represents an amount due from a nonmajor governmental fund related to the Department of the Treasury’s reimbursement programs to George Mason University and the Virginia Community College System (nonmajor component units).

A due from primary government amount that is due from the Virginia Public Building Authority (capital projects fund) to the Virginia Port Authority (nonmajor component unit) of $12.8 million represents bond revenue to be used for capital projects.

A $30.4 million due from component units in the Health Care Fund (internal service fund) represents amounts due from the nonmajor component units.

An $865,011 due from component units represents monies owed for administrative and project expenses from the Science Museum of Virginia Foundation (nonmajor component unit) to a nonmajor governmental fund. The entire nonmajor governmental amount is reported in the government-wide financial statements.

The $117.5 million due from component units amount represents amounts due from the Virginia College Building Authority (major component unit) for the Department of the Treasury’s reimbursement programs to higher education institutions (nonmajor component units). There is a due to component units of $1.7 million from a foundation of Old Dominion University (nonmajor component unit) to the Virginia Commercial Space Flight Authority (nonmajor component unit).

Due from/to Component Units and Fiduciary Funds

A $35.5 million due from component units in the Pension and Other Employee Benefit Trust Funds (fiduciary funds) represents amounts due from nonmajor component units.

Loans Receivable/Payable Between Primary Government and Component Units

The College of William and Mary (nonmajor component unit) loans of $796,803 were used to fund a capital project until bonds were issued. Virginia Community College System (nonmajor component unit) loans of $3.4 million were used to primarily advance fund federally-funded programs. These amounts are due to a nonmajor governmental fund.

The $189.9 million in loans receivable from primary government represents loans from the Virginia Public School Authority (VPSA) (major component unit) to the Literary Special Revenue Fund (major governmental fund). The VPSA makes grants to local school divisions to finance the purchase of educational technology and security equipment. The VPSA makes these grants using the proceeds of notes issued for that purpose, which will be repaid from appropriations to be made by the Virginia General Assembly from the Literary Special Revenue Fund (major governmental fund).
The following table summarizes Other Assets as of June 30, 2019.

(Dollars in Thousands)

<table>
<thead>
<tr>
<th></th>
<th>Cash and Travel Advances</th>
<th>Net OPEB Asset (1)</th>
<th>Other Assets</th>
<th>Total Other Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Government:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>$ 1,217</td>
<td>$ 7,493</td>
<td>$ 31,329</td>
<td>$ 42,772</td>
</tr>
<tr>
<td>Major Special Revenue Funds:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commonwealth Transportation</td>
<td>282</td>
<td></td>
<td></td>
<td>282</td>
</tr>
<tr>
<td>Federal Trust</td>
<td>1,607</td>
<td></td>
<td></td>
<td>1,607</td>
</tr>
<tr>
<td>Nonmajor Governmental Funds</td>
<td>637</td>
<td></td>
<td></td>
<td>637</td>
</tr>
<tr>
<td>Major Enterprise Funds:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia Lottery</td>
<td>1</td>
<td>1,015</td>
<td></td>
<td>1,016</td>
</tr>
<tr>
<td>Virginia College Savings Plan</td>
<td>—</td>
<td>444</td>
<td></td>
<td>444</td>
</tr>
<tr>
<td>Nonmajor Enterprise Funds</td>
<td>206</td>
<td>3,608</td>
<td></td>
<td>3,814</td>
</tr>
<tr>
<td>Internal Service Funds (2)</td>
<td>—</td>
<td>2,423</td>
<td>31,294</td>
<td>33,717</td>
</tr>
<tr>
<td>Private Purpose</td>
<td>—</td>
<td>3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Agency Funds (3)</td>
<td>—</td>
<td>—</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>Total Primary Government</td>
<td>$ 3,950</td>
<td>$ 7,493</td>
<td>$ 31,329</td>
<td>$ 42,772</td>
</tr>
<tr>
<td><strong>Discrete Component Units:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia Housing Development Authority (4)</td>
<td>$ —</td>
<td>$ 46,667</td>
<td></td>
<td>$ 46,667</td>
</tr>
<tr>
<td>Nonmajor Component Units (5)</td>
<td>610</td>
<td></td>
<td>59,883</td>
<td>60,493</td>
</tr>
<tr>
<td>Total Component Units</td>
<td>$ 610</td>
<td>$ —</td>
<td>$ 106,550</td>
<td>$ 107,160</td>
</tr>
</tbody>
</table>

Notes (1) Other noncurrent assets in the proprietary and fiduciary funds represent the Virginia Sickness and Disability Program Net OPEB Asset applicable to the respective fund. The proprietary fund amounts are reclassified to Other Restricted Assets in the Government-wide Statement of Net Position. The Private Purpose amount is not included in the Government-wide Statement of Net Position.

Notes (2) Of the $31,294 (dollars in thousands) shown above, $29,733 (dollars in thousands) and $1,561 (dollars in thousands) represent Virginia Information Technologies Agency and Virginia Correctional Enterprises, respectively, amounts due from various governmental funds that will not be received within 60 days. These amounts are reclassified to an internal balance on the Government-wide Statement of Net Position.

Notes (3) Other Assets of the Agency Funds represent prepaid expenses and advances to third party agents. The $34,887 shown above is not included in the Government-wide Statement of Net Position.

Notes (4) Other Assets of the Virginia Housing Development Authority are comprised of mortgage servicing rights of $46,667 (dollars in thousands).

Notes (5) Other Assets of the nonmajor component units are primarily comprised of miscellaneous items spread among the higher education institutions and related foundations.
13. RESTRICTED ASSETS

Restricted assets represent monies or other resources that must be used for specific legal or contractual requirements. The Commonwealth Transportation Fund (major special revenue), Debt Service Fund (nonmajor governmental), and Capital Project Fund (nonmajor governmental) reported $1.9 billion in restricted cash, cash equivalents, and investments primarily related to bond agreements. The governmental and business-type activities funds reported other restricted assets of $134.6 million and $5.1 million, respectively, for the Virginia Sickness and Disability Program Net OPEB Asset. See Note 12, Other Assets, for more information related to the Enterprise and Internal Service Funds.

The Virginia Housing Development Authority, the Virginia Public School Authority, and the Virginia College Building Authority (all major component units) reported restricted assets totaling $1.4 billion, $247.8 million, and $438.1 million, respectively. These major component units’ assets are restricted for debt service under a bond indenture or other agreement, or for construction and equipment.

The Virginia Resources Authority (major component unit) reported restricted assets of $882.3 million. Of this amount, $874.5 million is restricted for loans to local governments, bond indentures, or federal and state regulations for various revolving funds, and $7.8 million is restricted for the Operating Reserve Fund for the Virginia Pooled Financing Program.

The Virginia Port Authority (nonmajor component unit) reported restricted assets of $136.0 million primarily for debt service under bond agreements, construction and other project funds.

The Tobacco Region Revitalization Commission (nonmajor component unit) reported restricted assets of $193.0 million to be used for financial aid to tobacco growers and to foster community economic growth. This includes Other Restricted Assets of $48,000 for the Virginia Sickness and Disability Program Net OPEB asset.

The Hampton Roads Sanitation District Commission (nonmajor component unit) reported restricted assets of $42.9 million to be used for debt service.

The Virginia Small Business Financing Authority (nonmajor component unit) reported restricted assets of $41.7 million for gifts and grants. This includes Other Restricted Assets of $24,420 for the Virginia Sickness and Disability Program Net OPEB asset.

The higher education institutions (nonmajor component units) reported restricted assets totaling approximately $6.5 billion primarily for endowment and other contractual obligations. Included in this amount is approximately $5.7 billion of foundations’ restricted assets. This includes Other Restricted Assets of $84.6 million for the Virginia Sickness and Disability Program Net OPEB asset. The Virginia Commonwealth University Health System Authority (Authority) (a blended component unit of Virginia Commonwealth University—nonmajor component unit) includes $18.6 million for a beneficial trust and $4.3 million for an equity interest in a foundation as Other Restricted Assets. These Authority assets are classified as Level 3 of the fair value hierarchy. For additional information, see the Authority’s separately issued financial statements.

The two museum foundations, the Virginia Museum of Fine Arts Foundation (nonmajor component unit) and the Science Museum of Virginia Foundation (nonmajor component unit) had restricted assets of $239.5 million and $20.6 million, respectively, primarily for donor-imposed restricted endowments.

The remaining $8.8 million is spread among the following nonmajor component units: the Virginia Outdoors Foundation, the Danville Science Center, the Fort Monroe Authority, the Virginia Arts Foundation, the Virginia Biotechnology Research Partnership Authority, the Virginia Economic Development Partnership, the Virginia Tourism Authority, the Virginia Foundation for Healthy Youth, and the Library of Virginia Foundation. Included in this amount is approximately $930,000 for the Virginia Sickness and Disability Program Net OPEB asset.
14. CAPITAL ASSETS

The following schedule presents the changes in the Capital Assets as of June 30, 2019 (dollars in thousands).

### Schedule of Changes in Capital Assets

#### Governmental Activities

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Nondepreciable Capital Assets:</th>
<th>Balance July 1 as restated (1)</th>
<th>Increases</th>
<th>Decreases</th>
<th>Balance June 30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>3,351,771</td>
<td>136,766</td>
<td>(33,455)</td>
<td>3,455,082</td>
</tr>
<tr>
<td>Water Rights and/or Easements</td>
<td>95,968</td>
<td>9,558</td>
<td>—</td>
<td>105,526</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>1,308,220</td>
<td>—</td>
<td>—</td>
<td>1,308,220</td>
</tr>
<tr>
<td>Construction-in-Progress</td>
<td>4,171,613</td>
<td>1,608,382</td>
<td>(2,009,656)</td>
<td>3,770,339</td>
</tr>
<tr>
<td><strong>Total Nondepreciable Capital Assets</strong></td>
<td>8,927,572</td>
<td>1,754,706</td>
<td>(2,043,111)</td>
<td>8,639,167</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Depreciable Capital Assets:</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Buildings (2)</td>
<td>4,237,017</td>
<td>231,444</td>
<td>(13,448)</td>
<td>4,455,013</td>
</tr>
<tr>
<td>Equipment</td>
<td>1,326,769</td>
<td>61,300</td>
<td>(41,420)</td>
<td>1,346,649</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>31,946,548</td>
<td>1,855,174</td>
<td>(581,160)</td>
<td>33,220,562</td>
</tr>
<tr>
<td>Software</td>
<td>739,653</td>
<td>200,160</td>
<td>(659)</td>
<td>939,154</td>
</tr>
<tr>
<td><strong>Total Capital Assets being Depreciated</strong></td>
<td>38,249,987</td>
<td>2,348,078</td>
<td>(636,687)</td>
<td>39,961,378</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Less Accumulated Depreciation for:</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Buildings</td>
<td>1,627,154</td>
<td>104,275</td>
<td>(11,296)</td>
<td>1,720,133</td>
</tr>
<tr>
<td>Equipment</td>
<td>798,021</td>
<td>72,736</td>
<td>(37,902)</td>
<td>832,855</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>11,050,691</td>
<td>1,080,550</td>
<td>(336,855)</td>
<td>11,794,386</td>
</tr>
<tr>
<td>Software</td>
<td>382,478</td>
<td>66,878</td>
<td>(233)</td>
<td>449,123</td>
</tr>
<tr>
<td><strong>Total Accumulated Depreciation</strong></td>
<td>13,858,344</td>
<td>1,324,439</td>
<td>(386,286)</td>
<td>14,796,497</td>
</tr>
<tr>
<td><strong>Total Depreciable Capital Assets, Net</strong></td>
<td>24,391,643</td>
<td>1,023,639</td>
<td>(250,401)</td>
<td>25,164,881</td>
</tr>
<tr>
<td><strong>Total Capital Assets, Net</strong></td>
<td>$ 33,319,215</td>
<td>$ 2,778,345</td>
<td>(2,293,512)</td>
<td>$ 33,804,048</td>
</tr>
</tbody>
</table>

Note (1): Beginning balances have been restated by $2.7 million as discussed in Note 2.
Note (2): Includes temporarily impaired assets with a carrying value of $1.0 million.

### Depreciation Expense Charged to Functions of the Primary Government

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Governmental Activities:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>General Government</td>
<td>$ 30,441</td>
</tr>
<tr>
<td>Education</td>
<td>8,694</td>
</tr>
<tr>
<td>Transportation</td>
<td>1,120,674</td>
</tr>
<tr>
<td>Resources and Economic Development</td>
<td>30,564</td>
</tr>
<tr>
<td>Individual and Family Services</td>
<td>57,474</td>
</tr>
<tr>
<td>Administration of Justice</td>
<td>51,319</td>
</tr>
<tr>
<td>Capital Assets held by the Internal Service</td>
<td>25,273</td>
</tr>
<tr>
<td>Funds are charged to various functions</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$ 1,324,439</td>
</tr>
</tbody>
</table>
### Schedule of Changes in Capital Assets
#### Business-type Activities

**Dollars in Thousands**

<table>
<thead>
<tr>
<th>Nondepreciable Capital Assets</th>
<th>Balance</th>
<th>Increases</th>
<th>Decreases</th>
<th>Balance</th>
<th>Increases</th>
<th>Decreases</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>$1,874</td>
<td>—</td>
<td>— $1,874</td>
<td>$1,874</td>
<td>—</td>
<td></td>
<td>9,013</td>
</tr>
<tr>
<td>Construction-in-Progress</td>
<td>1,461</td>
<td>7,688</td>
<td>(136)</td>
<td>9,013</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Nondepreciable Capital Assets</strong></td>
<td>3,335</td>
<td>7,688</td>
<td>(136)</td>
<td>10,887</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Depreciable Capital Assets:

| Buildings                  | 22,801 | 411      | — $23,212 | 91,181  | 10,859   |         |         |
| Equipment                  | 62,560 | 2,879    | (905)     | 64,534  |           |         |         |
| Software                   | 13,146 | 2,393    | (26)      | 15,513  |           |         |         |
| **Total Capital Assets being Depreciated** | 98,507 | 5,683    | (931)     | 103,259 | 1,051    | 103,310 |         |

#### Less Accumulated Depreciation for:

| Buildings                  | 12,890 | 399      | — 13,289  |         |         |         |         |
| Equipment                  | 46,092 | 4,264    | (874)     | 49,482  | 100,640  |         |         |
| Software                   | 9,065  | 1,818    | (24)      | 10,859  | 1,605    |         |         |
| **Total Accumulated Depreciation** | 68,047 | 6,481    | (898)     | 73,630  | 29,629   |         |         |

#### Total Capital Assets, Net

| Land                        | $656,947 | 26,051   | (5,411)   | $677,587 | 342,067  | 1,019,654 |         |
| Construction-in-Progress    | 1,606,937| 1,610,443| 924,929   | 2,292,451| 91,181   | 2,383,632 |         |
| Inexhaustible Works of Art/Historical Treasures | 81,526 | 3,971     | (72)      | 85,425  | 15,215   | 100,640   |         |
| Livestock                   | 3,340   | —        | (3,019)   | 321     | 1,284    | 1,605     |         |
| **Total Nondepreciable Capital Assets** | 2,348,750 | 1,640,465| 933,431   | 3,055,784| 449,747  | 3,505,531 |         |

#### Depreciable Capital Assets:

| Buildings                  | 17,635,505| 642,178  | (56,276)  | 18,221,407| 1,323,763| 19,545,170|         |
| Infrastructure             | 3,900,953 | 109,387  | (3,901)   | 4,006,439 | 11,918   | 4,018,357|         |
| Equipment                  | 3,850,812 | 350,741  | 112,928   | 4,088,625| 178,345  | 4,266,970|         |
| Improvements Other Than Buildings | 576,274 | 25,493    | (24,334)  | 577,433  | 99,796   | 677,229  |         |
| Library Books              | 748,629  | 14,843   | (13,260)  | 750,212  | —         | 750,212  |         |
| Software                   | 2,691,116| 60,694   | (20,735)  | 2,731,075| —         | 2,731,075|         |
| Other Intangible Assets     | 2,000    | —        | —         | 2,000    | —         | 2,000    |         |
| **Total Depreciable Capital Assets** | 29,405,289| 1,203,336| 231,434   | 30,377,191| 1,613,822| 31,991,013|         |

#### Less Accumulated Depreciation for:

| Buildings                  | 5,977,378| 498,720  | (45,714)  | 6,430,384| 401,505  | 6,831,889|         |
| Infrastructure             | 1,795,733| 108,257  | (2,966)   | 1,901,020| 4,366   | 1,905,386|         |
| Equipment                  | 2,669,582| 278,824  | (104,961) | 2,843,445| 128,671  | 2,972,116|         |
| Improvements Other Than Buildings | 361,644 | 26,273   | (3,691)   | 384,226  | 60,072   | 444,298  |         |
| Library Books              | 656,412  | 26,314   | (12,865)  | 669,861  | —         | 669,861  |         |
| Software                   | 490,790  | 69,706   | (17,601)  | 542,895  | —         | 542,895  |         |
| Other Intangible Assets     | 1,866    | 134      | —         | 2,000    | —         | 2,000    |         |
| **Total Accumulated Depreciation** | 11,953,405| 1,008,224| 187,796   | 12,773,831| 594,614  | 13,368,445|         |

#### Total Capital Assets, Net

| Land                        | $1,800,634| 1,835,577| (977,067) | $20,659,144| 1,468,955| 22,128,099|         |

---

**Note (1)** Foundations represent FASB reporting entities defined in Note 1.B. Since foundations follow FASB rather than GASB reporting requirements, no amounts are reported in the software and other intangible assets categories for foundations.
15. DEFERRED OUTFLOWS AND DEFERRED INFLOWS OF RESOURCES

GASB Statement No. 65, *Items Previously Reported as Assets and Liabilities*, requires certain items to be classified as either deferred outflows or deferred inflows of resources. Additionally, deferred outflows or deferred inflows of resources are also required by other GASB statements. While all deferred outflows or deferred inflows of resources applicable to the Commonwealth are listed below, see Notes 16, 17, 19, and 38 for additional information regarding these items.

**Deferred Outflows**
Deferred outflows of resources are a consumption of assets by the government that is applicable to a future reporting period.

**Deferred Inflows**
Deferred inflows of resources are an acquisition of assets by the government that is applicable to a future reporting period.

The following tables summarize deferred outflows and deferred inflows of resources as of June 30, 2019.

### Government-wide Statements

**Government-wide Statements**

**Government-wide Statements**

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Deferred Outflows of Resources</th>
<th>Primary Government</th>
<th>Total Component Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effective Hedges in a Loss Position</strong></td>
<td>$ —</td>
<td>$ —</td>
</tr>
<tr>
<td><strong>Loss on Refunding of Debt</strong></td>
<td>72,669</td>
<td>—</td>
</tr>
<tr>
<td><strong>Government Acquisition-Goodwill</strong></td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Pension Related</strong></td>
<td>524,860</td>
<td>17,305</td>
</tr>
<tr>
<td><strong>Other Postemployment Benefit Related</strong></td>
<td>170,642</td>
<td>5,539</td>
</tr>
<tr>
<td><strong>Total Deferred Outflows of Resources</strong></td>
<td>$ 768,171</td>
<td>$ 22,844</td>
</tr>
</tbody>
</table>

**Deferred Inflows of Resources**

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Deferred Inflows of Resources</th>
<th>Primary Government</th>
<th>Total Component Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Service Concession Arrangements</strong></td>
<td>$ 3,550,488</td>
<td>$ —</td>
</tr>
<tr>
<td><strong>Gain on Refunding of Debt</strong></td>
<td>20</td>
<td>—</td>
</tr>
<tr>
<td><strong>Pension Related</strong></td>
<td>476,659</td>
<td>12,215</td>
</tr>
<tr>
<td><strong>Other Postemployment Benefit Related</strong></td>
<td>465,862</td>
<td>14,845</td>
</tr>
<tr>
<td><strong>Irrevocable Split-Interest Agreements Related</strong></td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total Deferred Inflows of Resources</strong></td>
<td>$ 4,493,029</td>
<td>$ 27,060</td>
</tr>
</tbody>
</table>

### Fund Statements

**Fund Statements**

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Deferred Outflows of Resources</th>
<th>Primary Government - Governmental Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Deferred Outflows of Resources</strong></td>
<td>$ —</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Deferred Inflows of Resources</th>
<th>Primary Government - Governmental Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Service Concession Arrangements</strong></td>
<td>$ 1,129,195</td>
</tr>
<tr>
<td><strong>Revenues Considered Unavailable</strong></td>
<td>1,129,195</td>
</tr>
<tr>
<td><strong>Total Deferred Inflows of Resources</strong></td>
<td>$ 1,129,195</td>
</tr>
</tbody>
</table>

(Continued on next page)
### Business-type Activities

**Enterprise Funds**

<table>
<thead>
<tr>
<th>Component</th>
<th>Virginia Lottery</th>
<th>Virginia College Savings Plan</th>
<th>Nonmajor</th>
<th>Total Business-type Activities</th>
<th>Internal Service Funds</th>
<th>Private Purpose Trust Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deferred Outflows of Resources</td>
<td>$2,798</td>
<td>$1,601</td>
<td>$12,906</td>
<td>$17,305</td>
<td>$8,468</td>
<td>$5</td>
</tr>
<tr>
<td>Pension Related</td>
<td>855</td>
<td>421</td>
<td>4,263</td>
<td>5,539</td>
<td>2,271</td>
<td>1</td>
</tr>
<tr>
<td>Total Deferred Outflows of Resources</td>
<td>$3,653</td>
<td>$2,022</td>
<td>$17,169</td>
<td>$22,844</td>
<td>$10,739</td>
<td>$6</td>
</tr>
<tr>
<td>Deferred Inflows of Resources</td>
<td>$2,526</td>
<td>$879</td>
<td>$8,810</td>
<td>$12,215</td>
<td>$6,885</td>
<td>$4</td>
</tr>
<tr>
<td>Pension Related</td>
<td>2,462</td>
<td>879</td>
<td>11,504</td>
<td>14,845</td>
<td>5,998</td>
<td>3</td>
</tr>
<tr>
<td>Total Deferred Inflows of Resources</td>
<td>$4,988</td>
<td>$1,758</td>
<td>$20,314</td>
<td>$27,060</td>
<td>$12,883</td>
<td>$7</td>
</tr>
</tbody>
</table>

**Component Units**

<table>
<thead>
<tr>
<th>Component</th>
<th>Virginia Housing Development Authority</th>
<th>Virginia Public School Authority</th>
<th>Virginia Resources Authority</th>
<th>Virginia College Building Authority</th>
<th>Nonmajor Component Units</th>
<th>Total Component Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deferred Outflows of Resources</td>
<td>—</td>
<td>$93,352</td>
<td>$63,647</td>
<td>30,321</td>
<td>155,868</td>
<td>343,188</td>
</tr>
<tr>
<td>Effective Hedges in a Loss Position</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>$3,147</td>
<td>$3,147</td>
</tr>
<tr>
<td>Loss on Refunding of Debt</td>
<td>—</td>
<td>93,352</td>
<td>—</td>
<td>—</td>
<td>155,868</td>
<td>343,188</td>
</tr>
<tr>
<td>Government Acquisition-Goodwill</td>
<td>—</td>
<td>—</td>
<td>90</td>
<td>—</td>
<td>340,167</td>
<td>340,257</td>
</tr>
<tr>
<td>Pension Related</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>15,568</td>
<td>15,568</td>
</tr>
<tr>
<td>Total Deferred Inflows of Resources</td>
<td>$4,711</td>
<td>$93,352</td>
<td>$63,750</td>
<td>$30,321</td>
<td>$663,295</td>
<td>$855,429</td>
</tr>
<tr>
<td>Deferred Inflows of Resources</td>
<td>—</td>
<td>—</td>
<td>31,099</td>
<td>—</td>
<td>$47,695</td>
<td>$47,695</td>
</tr>
<tr>
<td>Service Concession Arrangements</td>
<td>—</td>
<td>—</td>
<td>31,099</td>
<td>—</td>
<td>8,684</td>
<td>39,783</td>
</tr>
<tr>
<td>Gain on Refunding of Debt</td>
<td>—</td>
<td>—</td>
<td>129</td>
<td>—</td>
<td>277,741</td>
<td>277,870</td>
</tr>
<tr>
<td>Pension Related</td>
<td>—</td>
<td>—</td>
<td>17</td>
<td>—</td>
<td>373,575</td>
<td>373,779</td>
</tr>
<tr>
<td>Other Postemployment Benefit Related</td>
<td>187</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>14,882</td>
<td>14,882</td>
</tr>
<tr>
<td>Total Deferred Inflows of Resources</td>
<td>$187</td>
<td>—</td>
<td>$31,245</td>
<td>—</td>
<td>$722,577</td>
<td>$754,009</td>
</tr>
</tbody>
</table>
16. DERIVATIVES


Primary Government

Derivative instruments are financial contracts whose values depend on the values of one or more underlying assets, reference rates or financial indexes. They include futures, forwards, options and swap contracts. Some traditional securities, such as structured notes, can have derivative-like characteristics. In this case, the return may be linked to one or more indexes and asset-backed securities, such as collateralized mortgage obligations (CMOs), which are sensitive to changes in interest rates and pre-payments. Futures, forwards, options and swaps generally are not recorded on the financial statements, whereas structured notes and asset-backed investments generally are recorded.

Virginia College Savings Plan (Virginia529)

GASB Statement No. 53 defines stable value investment vehicles as synthetic guaranteed investment contracts. Stable value funds are invested in a high quality, diversified, intermediate term, fixed income portfolio that is protected against interest rate volatility by wrap or investment contracts from banks and insurance companies that guarantee the payment of benefits at book value (cost plus accrued interest), which enables the entire investment to be carried at its book value. The Virginia529 utilizes stable value investments in both the Prepaid529 Program (major enterprise fund) and Invest529 Program (Private Purpose Trust Fund). Virginia529’s stable value investments meet the definition of fully benefit-responsive synthetic guaranteed investment contracts and are reported at contract value. As of June 30, 2019, Virginia529 had the following stable value investments outstanding (dollars in thousands) in the respective programs as shown in the table below.

<table>
<thead>
<tr>
<th>Stable Value Investments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fund</strong></td>
</tr>
<tr>
<td>Enterprise</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Private Purpose</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
The following table (dollars in thousands) contains information relating to fair value, changes in fair value, and notional value for U.S. Treasury Futures Contracts.

<table>
<thead>
<tr>
<th>Fund</th>
<th>Classification</th>
<th>Amount</th>
<th>Classification</th>
<th>Amount</th>
<th>Notional Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise</td>
<td>Revenue</td>
<td>$ (161)</td>
<td>Investment</td>
<td>$ 247</td>
<td>$ 18,246</td>
</tr>
</tbody>
</table>

Pursuant to its investment management agreement, Advent Capital Management, LLC (Advent) may invest in derivatives for hedging purposes or for efficient portfolio management. Synthetic positions are not allowed and the use of derivatives should not be considered as an alpha generator. Advent primarily uses forward foreign exchange contracts to hedge the value of investments denominated in non-U.S. dollar currencies. Credit risk of exchange traded currency contracts lies with the clearinghouse of the exchange at which the contracts are traded, while credit risk of currency contracts traded over the counter lies with the counterparty. Counterparty risk exposure is generally equal to the unrealized gain on in-the-money contracts. The following table (dollars in thousands) contains a breakdown of these forward contracts by currency.

Additional information is available in the Virginia529 separately issued financial statements, which may be obtained at www.virginia529.com.

**Virginia Retirement System**

All derivatives held by the Virginia Retirement System (the System) are considered investments. The fair value of all derivative financial instruments is reported on a net basis on the Statement of Fiduciary Net Position. The derivative instruments are either subject to an enforceable master netting arrangement or similar agreement. The master netting arrangements allow the System to net applicable liabilities or payment obligations to counterparties to the derivative contracts against amounts owed to the System by the counterparties.

The System holds investments in swaps, options and futures and enters into forward foreign currency exchange contracts. Futures, currency forwards and options contracts provide the System with the opportunity to build passive benchmark positions, manage portfolio duration in relation to various benchmarks, adjust portfolio yield curve exposure and gain market exposure to various indexes in a more efficient way and at lower transaction costs. Derivatives that are exchange-traded are not subject to credit risk, but all over-the-counter derivatives, such as swaps and currency forwards, do expose the System to counterparty credit risk. Counterparty credit risk for the System’s investments in derivatives instruments is summarized in the table on page 130. Market risks arise from adverse changes in market prices, interest rates and foreign exchange rates. The System’s level of exposure to interest rate risk through derivative instruments and the System’s investments in derivative instruments as of June 30, 2019, are summarized in the tables below (dollars in thousands).

**Derivative Investments Summary**

**Derivative Instruments Subject to Interest Rate Risk**

<table>
<thead>
<tr>
<th>Investment Type</th>
<th>Fair Value June 30, 2019</th>
<th>Investment Maturities (in years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Under 1</td>
<td>1-5</td>
</tr>
<tr>
<td>Credit Default Swaps Bought</td>
<td>1,403</td>
<td>$ 1,403</td>
</tr>
<tr>
<td>Credit Default Swaps Written</td>
<td>197</td>
<td>(4)</td>
</tr>
<tr>
<td>Receive Fixed Foreign Currency Swaps</td>
<td>3,099</td>
<td>3,099</td>
</tr>
<tr>
<td>Pay Fixed Interest Rate Swaps</td>
<td>(8,396)</td>
<td>(603)</td>
</tr>
<tr>
<td>Receive Fixed Interest Rate Swaps</td>
<td>12,445</td>
<td>(271)</td>
</tr>
<tr>
<td>Total</td>
<td>$ 8,748</td>
<td>(978)</td>
</tr>
</tbody>
</table>

Commonwealth of Virginia 123
**Futures Contracts**

Futures contracts are contracts to deliver or receive securities at a specified future date and at a specified price or yield. Futures contracts are traded on organized exchanges (exchange-traded) and require an initial margin (collateral) in the form of cash or marketable securities. The net change in the futures contract value is settled daily, in cash, with the exchanges. The net gains or losses resulting from the daily settlements are included in the Statement of Changes in Fiduciary Net Position. Holders of futures contracts look to the exchange for performance under the contract and not to the entity holding the offsetting futures position. Accordingly, the amount at risk posed by nonperformance of counterparties to futures contracts is minimal. Information on the System's investments in fixed income, foreign currency, commodities, and equity index futures as of June 30, 2019, is shown in the Summary table on the previous page (dollars in thousands).

---

**Currency Forwards**

Currency forwards represent foreign exchange contracts and are used by the System to effect settlements and to protect the base currency (U.S.) value of portfolio assets denominated in foreign currencies against fluctuations in the exchange rates of those currencies. A forward foreign currency exchange contract is a commitment to purchase or sell a foreign currency at a future date at a negotiated price. The credit risk of currency contracts that are exchange-traded lies with the clearinghouse of the exchange where the contracts are traded. The credit risk of currency contracts traded over the counter lies with the counterparty, and exposure usually is equal to the unrealized profit on in-the-money contracts. The market risk in foreign currency contracts is related to adverse movements in currency exchange rates. The gain or loss arising from the difference between the original contracts and the closing of such contracts is included in the net realized gains or losses on foreign currency-related transactions in the Statement of Changes in Fiduciary Net Position. Information on the System’s currency forward contracts as of June 30, 2019, is shown in the following table and in the Summary table on the previous page.
<table>
<thead>
<tr>
<th>Currency</th>
<th>Cost</th>
<th>Pending Foreign Exchange Purchases</th>
<th>Pending Foreign Exchange Sales</th>
<th>Fair Value 2019</th>
<th>Fair Value 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentine Peso</td>
<td>$337</td>
<td>$42,093</td>
<td>(41,374)</td>
<td>$719</td>
<td>(1,580)</td>
</tr>
<tr>
<td>Australian Dollar</td>
<td>(323,869)</td>
<td>174,732</td>
<td>(49,553)</td>
<td>(322,821)</td>
<td>49,207</td>
</tr>
<tr>
<td>Brazilian Real</td>
<td>4,652</td>
<td>27,501</td>
<td>(22,418)</td>
<td>5,083</td>
<td>(44,240)</td>
</tr>
<tr>
<td>British Pound Sterling</td>
<td>(748,028)</td>
<td>189,325</td>
<td>(935,320)</td>
<td>(745,995)</td>
<td>(613,241)</td>
</tr>
<tr>
<td>Canadian Dollar</td>
<td>(475,215)</td>
<td>291,808</td>
<td>(767,996)</td>
<td>(476,188)</td>
<td>(239,768)</td>
</tr>
<tr>
<td>Chilean Peso</td>
<td>(5,242)</td>
<td>20,129</td>
<td>(25,459)</td>
<td>(5,330)</td>
<td>6,205</td>
</tr>
<tr>
<td>Chinese Yuan Renminbi</td>
<td>(45,785)</td>
<td>5,844</td>
<td>(52,053)</td>
<td>(46,209)</td>
<td>(46,367)</td>
</tr>
<tr>
<td>Chinese Yuan Renminbi HK</td>
<td>1,232</td>
<td>35,177</td>
<td>(34,988)</td>
<td>189</td>
<td>(14,282)</td>
</tr>
<tr>
<td>Colombian Peso</td>
<td>18,058</td>
<td>25,688</td>
<td>(7,070)</td>
<td>18,618</td>
<td>9,451</td>
</tr>
<tr>
<td>Czech Koruna</td>
<td>34,377</td>
<td>45,647</td>
<td>(10,104)</td>
<td>35,543</td>
<td>53,882</td>
</tr>
<tr>
<td>Danish Krone</td>
<td>(60,522)</td>
<td>11,789</td>
<td>(72,397)</td>
<td>(60,608)</td>
<td>(71,218)</td>
</tr>
<tr>
<td>Egyptian Pound</td>
<td>7,963</td>
<td>16,807</td>
<td>(8,080)</td>
<td>8,727</td>
<td>8,427</td>
</tr>
<tr>
<td>Euro Currency Unit</td>
<td>(1,493,896)</td>
<td>546,622</td>
<td>(2,046,534)</td>
<td>(1,499,912)</td>
<td>(1,816,748)</td>
</tr>
<tr>
<td>Hong Kong Dollar</td>
<td>(170,681)</td>
<td>15,229</td>
<td>(185,717)</td>
<td>(170,488)</td>
<td>(181,446)</td>
</tr>
<tr>
<td>Hungarian Forint</td>
<td>(4,985)</td>
<td>9,491</td>
<td>(14,489)</td>
<td>(4,998)</td>
<td>(12,192)</td>
</tr>
<tr>
<td>Indian Rupee</td>
<td>10,595</td>
<td>11,970</td>
<td>(1,294)</td>
<td>10,676</td>
<td>(6,011)</td>
</tr>
<tr>
<td>Indonesian Rupiah</td>
<td>(17,096)</td>
<td>11,436</td>
<td>(28,517)</td>
<td>(17,081)</td>
<td>3,515</td>
</tr>
<tr>
<td>Israeli Shekel</td>
<td>(21,630)</td>
<td>7,693</td>
<td>(29,381)</td>
<td>(21,688)</td>
<td>(25,389)</td>
</tr>
<tr>
<td>Japanese Yen</td>
<td>(668,515)</td>
<td>395,550</td>
<td>(1,059,969)</td>
<td>(664,419)</td>
<td>(1,150,961)</td>
</tr>
<tr>
<td>Kazakhstan Tenge</td>
<td>269</td>
<td>4,658</td>
<td>(4,327)</td>
<td>331</td>
<td>2,578</td>
</tr>
<tr>
<td>Malaysian Ringgit</td>
<td>6,314</td>
<td>14,630</td>
<td>(8,338)</td>
<td>6,292</td>
<td>(787)</td>
</tr>
<tr>
<td>Mexican Peso</td>
<td>29,159</td>
<td>52,873</td>
<td>(23,680)</td>
<td>29,193</td>
<td>40,960</td>
</tr>
<tr>
<td>New Taiwan Dollar</td>
<td>(4,165)</td>
<td>6,354</td>
<td>(10,594)</td>
<td>(4,240)</td>
<td>(2,128)</td>
</tr>
<tr>
<td>New Zealand Dollar</td>
<td>326,332</td>
<td>420,384</td>
<td>(86,962)</td>
<td>333,422</td>
<td>86,033</td>
</tr>
<tr>
<td>Nigerian Naira</td>
<td>8,768</td>
<td>11,467</td>
<td>(2,385)</td>
<td>9,082</td>
<td>6,427</td>
</tr>
<tr>
<td>Norwegian Krone</td>
<td>(295,788)</td>
<td>74,063</td>
<td>(373,707)</td>
<td>(299,844)</td>
<td>(222,461)</td>
</tr>
<tr>
<td>Omani Rial</td>
<td>6,962</td>
<td>(5,080)</td>
<td>—</td>
<td>(5,080)</td>
<td>(1,384)</td>
</tr>
<tr>
<td>Peruvian Sol</td>
<td>(7,021)</td>
<td>29,602</td>
<td>(36,632)</td>
<td>(7,030)</td>
<td>(3,454)</td>
</tr>
<tr>
<td>Philippine Peso</td>
<td>3,390</td>
<td>7,657</td>
<td>(4,216)</td>
<td>3,441</td>
<td>(8,199)</td>
</tr>
<tr>
<td>Polish Zloty</td>
<td>15,936</td>
<td>25,206</td>
<td>(9,105)</td>
<td>16,101</td>
<td>7,160</td>
</tr>
<tr>
<td>Romanian Leu</td>
<td>(4,388)</td>
<td>5,154</td>
<td>(9,591)</td>
<td>(4,437)</td>
<td>(9,681)</td>
</tr>
<tr>
<td>Russian Ruble (New)</td>
<td>(10,663)</td>
<td>11,793</td>
<td>(22,852)</td>
<td>(11,059)</td>
<td>12,888</td>
</tr>
<tr>
<td>Saudi Arabia Riyal</td>
<td>1</td>
<td>1,373</td>
<td>(1,373)</td>
<td>—</td>
<td>(1,373)</td>
</tr>
<tr>
<td>Singapore Dollar</td>
<td>(318,065)</td>
<td>29,061</td>
<td>(349,629)</td>
<td>(320,568)</td>
<td>(253,348)</td>
</tr>
<tr>
<td>South African Rand</td>
<td>(20,044)</td>
<td>20,844</td>
<td>(41,127)</td>
<td>(20,283)</td>
<td>(21,367)</td>
</tr>
<tr>
<td>South Korean Won</td>
<td>(17,579)</td>
<td>6,619</td>
<td>(24,399)</td>
<td>(17,780)</td>
<td>(5,234)</td>
</tr>
<tr>
<td>Swedish Krona</td>
<td>(88,869)</td>
<td>196,733</td>
<td>(283,915)</td>
<td>(87,182)</td>
<td>(289,244)</td>
</tr>
<tr>
<td>Swiss Franc</td>
<td>(256,704)</td>
<td>79,773</td>
<td>(335,051)</td>
<td>(255,278)</td>
<td>(266,256)</td>
</tr>
<tr>
<td>Thai Baht</td>
<td>8,519</td>
<td>20,052</td>
<td>(11,104)</td>
<td>8,948</td>
<td>23,590</td>
</tr>
<tr>
<td>Turkish Lira</td>
<td>4,578</td>
<td>10,923</td>
<td>(6,205)</td>
<td>4,718</td>
<td>30,073</td>
</tr>
<tr>
<td>Ukrainian Hryvnia</td>
<td>1,035</td>
<td>5,798</td>
<td>(4,618)</td>
<td>1,180</td>
<td>—</td>
</tr>
<tr>
<td>U.S. Dollar</td>
<td>4,582,297</td>
<td>7,371,710</td>
<td>(2,789,413)</td>
<td>4,582,297</td>
<td>4,992,352</td>
</tr>
</tbody>
</table>

Total Forwards Subject to Foreign Currency Risk $6,242 $24,389
Options Contracts

Options may be either exchange-traded or negotiated directly between two counterparties over the counter. Options grant the holder the right, but not the obligation, to purchase (call) or sell (put) a financial instrument at a specified price and within a specified period of time from the writer of the option.

As a purchaser of options, the System typically pays a premium at the outset. This premium is reflected as an asset on the financial statements. The System then retains the right, but not the obligation, to exercise the options and purchase the underlying financial instrument. Should the option not be exercised, it expires worthless, and the premium is recorded as a loss.

A writer of options assumes the obligation to deliver or receive the underlying financial instrument on exercise of the option. Certain option contracts may involve cash settlements based on specified indexes such as stock indexes. As a writer of options, the System receives a premium at the outset. This premium is reflected as a liability on the financial statements, and the System bears the risk of an unfavorable change in the price of the financial instrument underlying the option. Information on the System’s investments in foreign currency options as of June 30, 2019, is shown in the Summary table on page 123.

Swap Agreements

Swaps are negotiated contracts between two counterparties for the exchange of payments at certain intervals over a predetermined timeframe. The payments are based on a notional principal amount and calculated using either fixed or floating interest rates or total returns from certain instruments or indexes. Swaps are used to manage risk and enhance returns. To reduce the risk of counterparty nonperformance, the System generally requires collateral on any material gains from these transactions. During fiscal year 2019, the System had activity in credit default, foreign currency, interest rate and total return swaps. Gains and losses on swaps are determined based on fair values and are recorded in the Statement of Changes in Fiduciary Net Position. Information on the System’s swap balances as of June 30, 2019, is shown in the Summary table on page 123, and the terms, fair values and notional values of the System’s investments in swap agreements that are highly sensitive to interest rate changes are disclosed in the following tables (dollars in thousands).
<table>
<thead>
<tr>
<th>Investment Type</th>
<th>Reference Rate</th>
<th>Fair Value June 30, 2019</th>
<th>Notional Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign Currency Swaps</td>
<td>Receive Fixed Turkish Lira 20.79%, Pay Variable 3-month LIBOR USD</td>
<td>$403</td>
<td>$403</td>
</tr>
<tr>
<td>Foreign Currency Swaps</td>
<td>Receive Fixed Turkish Lira 22.38%, Pay Variable 3-month LIBOR USD</td>
<td>2,696</td>
<td>2,696</td>
</tr>
<tr>
<td>Foreign Currency Swaps</td>
<td>Receive Variable 3-month LIBOR USD, Pay Fixed Turkish Lira 23.67%</td>
<td>—</td>
<td>1,455</td>
</tr>
<tr>
<td><strong>Subtotal Foreign Currency Swaps</strong></td>
<td></td>
<td><strong>3,099</strong></td>
<td><strong>4,554</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Investment Type</th>
<th>Reference Rate</th>
<th>Fair Value June 30, 2019</th>
<th>Notional Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 1.81%, Pay Variable Israel 3-month TELBOR</td>
<td>220</td>
<td>5,271</td>
</tr>
<tr>
<td>Interest Rate Swaps</td>
<td>Receive Variable Israel 3-month TELBOR, Pay Fixed 0.26%</td>
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<td>27,618</td>
</tr>
<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 1.05%, Pay Variable Israel 3-month TELBOR</td>
<td>81</td>
<td>5,271</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 7.407%, Pay Variable 28-day MTIE</td>
<td>14</td>
<td>1,827</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 8.58%, Pay Variable 28-day MTIE</td>
<td>34</td>
<td>2,866</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 8.83%, Pay Variable 28-day MTIE</td>
<td>75</td>
<td>4,996</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 8.67%, Pay Variable 28-day MTIE</td>
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<td>2,477</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 7.87%, Pay Variable 28-day MTIE</td>
<td>33</td>
<td>5,742</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 7.51%, Pay Variable 28-day MTIE</td>
<td>27</td>
<td>7,696</td>
</tr>
<tr>
<td>Interest Rate Swaps</td>
<td>Receive Variable Chilean Peso 1-day CLICP, Pay Fixed 3.95%</td>
<td>(54)</td>
<td>898</td>
</tr>
<tr>
<td>Interest Rate Swaps</td>
<td>Receive Variable Chilean Peso 1-day CLICP, Pay Fixed 3.95%</td>
<td>(54)</td>
<td>898</td>
</tr>
<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 5.17%, Pay Variable 1-day Colombia IBR</td>
<td>19</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 5.83%, Pay Variable 1-day Colombia IBR</td>
<td>54</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 7.42%, Pay Variable Brazil 1-day CDI</td>
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<td>6,001</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 7.71%, Pay Variable Brazil 1-day CDI</td>
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<td>776</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 7.265%, Pay Variable Brazil 1-day CDI</td>
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<td>Interest Rate Swaps</td>
<td>Receive Variable Brazil 1-day CDI, Pay Fixed 6.25%</td>
<td>(42)</td>
<td>42,425</td>
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<td>Receive Variable Brazil 1-day CDI, Pay Fixed 6.93%</td>
<td>—</td>
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<td>Interest Rate Swaps</td>
<td>Receive Variable Brazil 1-day CDI, Pay Fixed 7.05%</td>
<td>(7)</td>
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<td>Interest Rate Swaps</td>
<td>Receive Variable Brazil 1-day CDI, Pay Fixed 8.635%</td>
<td>(526)</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 6.26%, Pay Variable Brazil 1-day CDI</td>
<td>—</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 6.93%, Pay Variable Brazil 1-day CDI</td>
<td>470</td>
<td>—</td>
</tr>
<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 7.42%, Pay Variable Brazil 1-day CDI</td>
<td>161</td>
<td>6,601</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 7.48%, Pay Variable Brazil 1-day CDI</td>
<td>69</td>
<td>3,575</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 7.80%, Pay Variable Brazil 1-day CDI</td>
<td>109</td>
<td>4,357</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 8.64%, Pay Variable Brazil 1-day CDI</td>
<td>141</td>
<td>2,374</td>
</tr>
<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 1.50%, Pay Variable Czech Krona 6-month PRIBOR</td>
<td>(123)</td>
<td>18,350</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 2.00%, Pay Variable Czech Krona 6-month PRIBOR</td>
<td>(136)</td>
<td>3,983</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 1.78%, Pay Variable Czech Krona 6-month PRIBOR</td>
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<td>2,014</td>
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<tr>
<td>Interest Rate Swaps</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 2.25%, Pay Variable 6-month Hungary BUBOR</td>
<td>322</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 2.00%, Pay Variable 6-month Hungary BUBOR</td>
<td>141</td>
<td>3,503</td>
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<tr>
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<td>Receive Fixed 1.20%, Pay Variable 6-month Hungary BUBOR</td>
<td>155</td>
<td>13,086</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 8.32%, Pay Variable 28-day MTIE</td>
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<td>2,655</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 6.71%, Pay Variable 28-day MTIE</td>
<td>(147)</td>
<td>2,275</td>
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<td>Interest Rate Swaps</td>
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<td>1,166</td>
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<td>Interest Rate Swaps</td>
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<td>14,090</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 8.80%, Pay Variable 28-day MTIE</td>
<td>334</td>
<td>5,731</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 8.97%, Pay Variable 28-day MTIE</td>
<td>363</td>
<td>5,606</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 8.61%, Pay Variable 28-day MTIE</td>
<td>217</td>
<td>2,863</td>
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<td>Interest Rate Swaps</td>
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<td>429</td>
<td>12,690</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 7.99%, Pay Variable 28-day MTIE</td>
<td>53</td>
<td>1,598</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 8.24%, Pay Variable 28-day MTIE</td>
<td>103</td>
<td>2,062</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 8.54%, Pay Variable 28-day MTIE</td>
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<td>1,400</td>
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<td>Receive Fixed 8.38%, Pay Variable 28-day MTIE</td>
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<td>8,151</td>
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<td>Receive Fixed 7.68%, Pay Variable 28-day MTIE</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 7.89%, Pay Variable 28-day MTIE</td>
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<td>2,103</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 2.25%, Pay Variable Poland 6-month WIBOR</td>
<td>(165)</td>
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<td>Interest Rate Swaps</td>
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<td>1,126</td>
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<td>Receive Fixed 3.00%, Pay Variable Poland 6-month WIBOR</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 2.25%, Pay Variable Poland 6-month WIBOR</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 1.50%, Pay Variable 3-month LIBOR</td>
<td>(192)</td>
<td>6,700</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 1.75%, Pay Variable 3-month LIBOR</td>
<td>(256)</td>
<td>2,500</td>
</tr>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 2.50%, Pay Variable 3-month LIBOR</td>
<td>17</td>
<td>290</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 3.00%, Pay Variable 3-month LIBOR</td>
<td>124</td>
<td>1,350</td>
</tr>
</tbody>
</table>

Continued on next page
<table>
<thead>
<tr>
<th>Investment Type</th>
<th>Reference Rate</th>
<th>Fair Value June 30, 2019</th>
<th>Notional Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest Rate Swaps</td>
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<td>278</td>
<td>4,710</td>
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<td>Receive Fixed 7.75%, Pay Variable 3-month JIBAR</td>
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<td>Receive Fixed 7.25%, Pay Variable 3-month JIBAR</td>
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<td>915</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 8.75%, Pay Variable 3-month JIBAR</td>
<td>298</td>
<td>3,096</td>
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<td>Interest Rate Swaps</td>
<td>Receive Variable Czech Krona 6-month PRIBOR, Pay Fixed 2.00%</td>
<td>(28)</td>
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<td>Receive Variable 6-month Hungarian BUBOR, Pay Fixed 1.25%</td>
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<td>Receive Variable 28-day MTIE, Pay Fixed 9.05%</td>
<td>(1,205)</td>
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<td>Interest Rate Swaps</td>
<td>Receive Variable 28-day MTIE, Pay Fixed 9.21%</td>
<td>(138)</td>
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</tr>
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<td>Interest Rate Swaps</td>
<td>Receive Variable 28-day MTIE, Pay Fixed 9.08%</td>
<td>(351)</td>
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<td>Interest Rate Swaps</td>
<td>Receive Variable 28-day MTIE, Pay Fixed 9.09%</td>
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<td>(286)</td>
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<td>Interest Rate Swaps</td>
<td>Receive Variable 28-day MTIE, Pay Fixed 7.75%</td>
<td>(125)</td>
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<td>Interest Rate Swaps</td>
<td>Receive Variable 28-day MTIE, Pay Fixed 7.9%</td>
<td>(71)</td>
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<td>Interest Rate Swaps</td>
<td>Receive Variable 28-day MTIE, Pay Fixed 8.26%</td>
<td>(14)</td>
<td>8,151</td>
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<td>Interest Rate Swaps</td>
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<td>Interest Rate Swaps</td>
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<td>Receive Variable 3-month LIBOR, Pay Fixed 3.00%</td>
<td>(461)</td>
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<tr>
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<td>Receive Variable 3-month JIBAR, Pay Fixed 9.50%</td>
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<tr>
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<td>Receive Variable 3-month JIBAR, Pay Fixed 8.50%</td>
<td>(28)</td>
<td>440</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Variable 3-month JIBAR, Pay Fixed 8.25%</td>
<td>(1)</td>
<td>28</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Variable 3-month JIBAR, Pay Fixed 7.75%</td>
<td>(87)</td>
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<td>(36)</td>
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<td>Receive Fixed 12.25%, Pay Variable Brazil 1-day CDI</td>
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<td>Receive Fixed 9.76%, Pay Variable Brazil 1-day CDI</td>
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<td>Interest Rate Swaps</td>
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<td>Interest Rate Swaps</td>
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<tr>
<td>Interest Rate Swaps</td>
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<td>4,696</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 11.35%, Pay Variable Brazil 1-day CDI</td>
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<td>783</td>
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<td>Interest Rate Swaps</td>
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</tr>
<tr>
<td>Interest Rate Swaps</td>
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<td>(1)</td>
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<td>332</td>
<td>12,994</td>
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<td>Receive Fixed 7.19%, Pay Variable Brazil 1-day CDI</td>
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<td>Receive Fixed 7.21%, Pay Variable Brazil 1-day CDI</td>
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<td>7,514</td>
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<td>Interest Rate Swaps</td>
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<td>Interest Rate Swaps</td>
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<td>Interest Rate Swaps</td>
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<td>Receive Variable Brazil 1-day CDI, Pay Fixed 9.64%</td>
<td>(71)</td>
<td>4,227</td>
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<td>Interest Rate Swaps</td>
<td>Receive Variable Brazil 1-day CDI, Pay Fixed 10.46%</td>
<td>(601)</td>
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<td>Interest Rate Swaps</td>
<td>Receive Variable Brazil 1-day CDI, Pay Fixed 7.06%</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Variable Brazil 1-day CDI, Pay Fixed 9.97%</td>
<td>(37)</td>
<td>720</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Variable Brazil 1-day CDI, Pay Fixed 11.03%</td>
<td>(140)</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Variable Brazil 1-day CDI, Pay Fixed 10.42%</td>
<td>(848)</td>
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<td>Interest Rate Swaps</td>
<td>Receive Variable Brazil 1-day CDI, Pay Fixed 10.09%</td>
<td>(323)</td>
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<td>Interest Rate Swaps</td>
<td>Receive Variable Brazil 1-day CDI, Pay Fixed 8.70%</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Variable Brazil 1-day CDI, Pay Fixed 6.98%</td>
<td>(103)</td>
<td>6,993</td>
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<td>Interest Rate Swaps</td>
<td>Receive Variable Brazil 1-day CDI, Pay Fixed 8.68%</td>
<td>(278)</td>
<td>21,265</td>
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<td>Interest Rate Swaps</td>
<td>Receive Variable Brazil 1-day CDI, Pay Fixed 6.4075%</td>
<td>29</td>
<td>119,656</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 12.23%, Pay Variable Brazil 1-day CDI</td>
<td>(49)</td>
<td>626</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 7.53%, Pay Variable 28-day MTIE</td>
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<td>Receive Fixed 8.71%, Pay Variable 28-day MTIE</td>
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<td>Receive Fixed 8.71%, Pay Variable 28-day MTIE</td>
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<td>Interest Rate Swaps</td>
<td>Receive Variable 28-day MTIE, Pay Fixed 5.25%</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 3.41%, Pay Variable 6-month Thai Baht fixing rate</td>
<td>5</td>
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</tr>
</tbody>
</table>

Continued on next page
### Derivatives Instruments Highly Sensitive to Interest Rate Changes

*Continued from previous page*

<table>
<thead>
<tr>
<th>Investment Type</th>
<th>Reference Rate</th>
<th>Fair Value</th>
<th>June 30, 2019</th>
<th>Notional Amount</th>
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<tbody>
<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 3.41%, Pay Variable 6-month Thai Baht fixing rate</td>
<td>5</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 5.29%, Pay Variable 1-day Colombia IBR</td>
<td>3</td>
<td>1,257</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 6.12%, Pay Variable 1-day Colombia IBR</td>
<td>53</td>
<td>742</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 5.00%, Pay Variable 28-day MTIIE</td>
<td>(10)</td>
<td>994</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 2.58%, Pay Variable 6-month Thai Baht fixing rate</td>
<td>17</td>
<td>372</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 5.32%, Pay Variable 1-day Colombia IBR</td>
<td>2</td>
<td>187</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 2.02%, Pay Variable 6-month Thai Baht fixing rate</td>
<td>3</td>
<td>620</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 2.58%, Pay Variable 6-month Thai Baht fixing rate</td>
<td>25</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 1.03%, Pay Variable 6-month Thai Baht fixing rate</td>
<td>8</td>
<td>1,271</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Variable Israel 3-month TELBOR, Pay Fixed 0.26%</td>
<td>1</td>
<td>34,515</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 1.81%, Pay Variable Israel 3-month TELBOR</td>
<td>100</td>
<td>2,383</td>
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<td>Interest Rate Swaps</td>
<td>Receive Variable 1-day Colombia IBR, Pay Fixed 6.65%</td>
<td>(12)</td>
<td>3,060</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 4.85%, Pay Variable 1-day Colombia IBR</td>
<td>31</td>
<td>2,085</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 4.81%, Pay Variable 1-day Colombia IBR</td>
<td>292</td>
<td>22,509</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Variable 1-day Colombia IBR, Pay Fixed 4.89%</td>
<td>(282)</td>
<td>19,021</td>
<td></td>
</tr>
<tr>
<td>Interest Rate Swaps</td>
<td>Receive Variable Israel 3-month TELBOR, Pay Fixed 0.59%</td>
<td>(20)</td>
<td>6,028</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 5.83%, Pay Variable 1-day Colombia IBR</td>
<td>4</td>
<td>98</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 1.92%, Pay Variable 6-month Thai Baht fixing rate</td>
<td>8</td>
<td>740</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 5.88%, Pay Variable 1-day Colombia IBR</td>
<td>47</td>
<td>945</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 7.97%, Pay Variable 28-day MTIIE</td>
<td>6</td>
<td>1,139</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 3.54%, Pay Variable Chilean Peso 6-month CLICP</td>
<td>124</td>
<td>3,913</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Variable Malaysian Ringgit 3-month KLIBOR, Pay Fixed 3.77%</td>
<td>(33)</td>
<td>3,097</td>
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<td>Interest Rate Swaps</td>
<td>Receive Variable Malaysian Ringgit 3-month KLIBOR, Pay Fixed 3.74%</td>
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<td>968</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Variable Malaysian Ringgit 3-month KLIBOR, Pay Fixed 3.76%</td>
<td>(18)</td>
<td>1,694</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Variable Chilean Peso 6-month CLICP, Pay Fixed 3.57%</td>
<td>(8)</td>
<td>220</td>
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</tr>
<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 3.54%, Pay Variable Chilean Peso 6-month CLICP</td>
<td>50</td>
<td>1,462</td>
<td></td>
</tr>
<tr>
<td>Interest Rate Swaps</td>
<td>Receive Variable Israel 3-month TELBOR, Pay Fixed 0.22%</td>
<td>9</td>
<td>35,553</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 1.72%, Pay Variable Israel 3-month TELBOR</td>
<td>217</td>
<td>6,421</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 4.86%, Pay Variable 1-day Colombia IBR</td>
<td>288</td>
<td>19,021</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Variable 1-day Colombia IBR, Pay Fixed 4.65%</td>
<td>(85)</td>
<td>8,450</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Variable 1-day Colombia IBR, Pay Fixed 4.65%</td>
<td>(131)</td>
<td>12,957</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 6.57%, Pay Variable 1-day Colombia IBR</td>
<td>216</td>
<td>1,965</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 4.28%, Pay Variable Chilean Peso 6-month CLICP</td>
<td>112</td>
<td>1,321</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 5.31%, Pay Variable 1-day Colombia IBR</td>
<td>105</td>
<td>2,908</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 2.10%, Pay Variable 6-month Thai Baht fixing rate</td>
<td>57</td>
<td>4,187</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 4.04%, Pay Variable Chilean Peso 6-month CLICP</td>
<td>210</td>
<td>3,210</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 0.97%, Pay Variable Israel 3-month TELBOR</td>
<td>62</td>
<td>5,524</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Variable Israel 3-month TELBOR, Pay Fixed 0.45%</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Variable 1-day Colombia IBR, Pay Fixed 4.49%</td>
<td>(299)</td>
<td>9,355</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 5.83%, Pay Variable 1-day Colombia IBR</td>
<td>462</td>
<td>9,978</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 1.94%, Pay Variable 6-month Thai Baht fixing rate</td>
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<td>1,043</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 2.18%, Pay Variable 6-month Thai Baht fixing rate</td>
<td>1</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Variable Israel 3-month TELBOR, Pay Fixed 0.95%</td>
<td>(50)</td>
<td>5,215</td>
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<td>Interest Rate Swaps</td>
<td>Receive Variable Israel 3-month TELBOR, Pay Fixed 0.96%</td>
<td>(52)</td>
<td>5,159</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 3.33%, Pay Variable Malaysian Ringgit 3-month KLIBOR</td>
<td>(1)</td>
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<td>Interest Rate Swaps</td>
<td>Receive Variable 1-day Colombia IBR, Pay Fixed 4.88%</td>
<td>(62)</td>
<td>4,303</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 3.27%, Pay Variable Chilean Peso 6-month CLICP</td>
<td>(2)</td>
<td>1,053</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 6.2%, Pay Variable 1-day Colombia IBR</td>
<td>16</td>
<td>221</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Fixed 2.505%, Pay Variable 6-month Thai Baht fixing rate</td>
<td>23</td>
<td>525</td>
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<td>Interest Rate Swaps</td>
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<td>2,446</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 2.55%, Pay Variable 6-month Thai Baht fixing rate</td>
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<td>1,011</td>
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<td>Interest Rate Swaps</td>
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<td>6,564</td>
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<td>Interest Rate Swaps</td>
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<td>1,542</td>
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<tr>
<td>Interest Rate Swaps</td>
<td>Receive Variable 6-month Thai Baht fixing rate, Pay Fixed 2.1%</td>
<td>(15)</td>
<td>760</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 2.20%, Pay Variable 6-month Thai Baht fixing rate</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 1.93%, Pay Variable 6-month Thai Baht fixing rate</td>
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<td>108</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 1.84%, Pay Variable 6-month Thai Baht fixing rate</td>
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<td>Interest Rate Swaps</td>
<td>Receive Fixed 1.96%, Pay Variable 6-month Thai Baht fixing rate</td>
<td>6</td>
<td>854</td>
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</table>

| Subtotal Interest Rate Swaps | | 4,049 | 1,090,650 |

*Continued on next page*
### Derivatives Instruments Highly Sensitive to Interest Rate Changes
(Continued from previous page)

<table>
<thead>
<tr>
<th>Investment Type</th>
<th>Reference Rate</th>
<th>Fair Value June 30, 2019</th>
<th>Notional Amount</th>
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<td>Total Return Bond Index Swaps</td>
<td>Receive Variable IBOXHY Index/ Pay Variable 3-month LIBOR</td>
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<td>30,522</td>
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<tr>
<td>Total Return Bond Index Swaps</td>
<td>Receive Variable Barclays Capital US Aggregate Index/ Pay Variable 1-month LIBOR + 15 bps</td>
<td>531</td>
<td>50,000</td>
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<tr>
<td>Total Return Equity Index Swaps</td>
<td>Receive Variable BCMSIMHC Index/ Pay Variable 3-month LIBOR + 16 bps</td>
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<td>2,385</td>
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<tr>
<td>Total Return Equity Index Swaps</td>
<td>Receive Variable BCMSIMHC Index/ Pay Variable 3-month LIBOR + 16 bps</td>
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<td>4,114</td>
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<tr>
<td>Total Return Equity Index Swaps</td>
<td>Receive Variable MSCI ACWI IMI Index/ Pay Variable 3-month LIBOR + 31.7 bps</td>
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<td>155</td>
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<tr>
<td>Total Return Equity Index Swaps</td>
<td>Receive Variable MSCI ACWI IMI Index/ Pay Variable 3-month LIBOR + 31.7 bps</td>
<td>805</td>
<td>39</td>
</tr>
<tr>
<td>Total Return Equity Index Swaps</td>
<td>Receive Variable MSCI ACWI IMI Index/ Pay Variable 3-month LIBOR + 31.7 bps</td>
<td>1,140</td>
<td>56</td>
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<tr>
<td>Total Return Equity Index Swaps</td>
<td>Receive Variable MSCI ACWI IMI Index/ Pay Variable 3-month LIBOR + 31.7 bps</td>
<td>596</td>
<td>29</td>
</tr>
<tr>
<td>Total Return Equity Index Swaps</td>
<td>Receive Variable MIMUJPNN Index/ Pay Variable 3-month LIBOR + 8 bps</td>
<td>6</td>
<td>13,757</td>
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<tr>
<td>Total Return Equity Index Swaps</td>
<td>Receive Variable MIMUUKGN Index/ Pay Variable 3-month LIBOR + 10 bps</td>
<td>9</td>
<td>9,910</td>
</tr>
<tr>
<td>Total Return Equity Index Swaps</td>
<td>Receive Variable MIMUUSAG Index/ Pay Variable 3-month LIBOR + 10 bps</td>
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<td>8,866</td>
</tr>
<tr>
<td>Total Return Equity Index Swaps</td>
<td>Receive Variable NDUEEGF Index/ Pay Variable 3-month LIBOR + 6 bps</td>
<td>(7)</td>
<td>19,997</td>
</tr>
<tr>
<td>Total Return Equity Index Swaps</td>
<td>Receive Variable MIMUUSAG Index/ Pay Variable 3-month LIBOR + 23 bps</td>
<td>—</td>
<td>8,866</td>
</tr>
<tr>
<td>Total Return Equity Index Swaps</td>
<td>Receive Variable NDUEEGF Index/ Pay Variable 3-month LIBOR + 17 bps</td>
<td>—</td>
<td>19,997</td>
</tr>
<tr>
<td>Total Return Equity Index Swaps</td>
<td>Receive Variable MIMUUSAG Index/ Pay Variable 3-month LIBOR + 20 bps</td>
<td>—</td>
<td>9,910</td>
</tr>
<tr>
<td>Total Return Equity Index Swaps</td>
<td>Receive Variable MIMUJPNN Index/ Pay Variable 3-month LIBOR - 15 bps</td>
<td>—</td>
<td>13,757</td>
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</table>

**Subtotal Total Return Swaps**

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<thead>
<tr>
<th></th>
<th>7,648</th>
<th>192,378</th>
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<tbody>
<tr>
<td><strong>TOTAL</strong></td>
<td>$ 14,796</td>
<td>$ 1,287,582</td>
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</table>

### Derivative Instruments Subject to Counterparty Credit Risk

<table>
<thead>
<tr>
<th>Counterparty</th>
<th>Percentage of Net</th>
<th>Moody's Ratings</th>
<th>S &amp; P Ratings</th>
<th>Fitch Ratings</th>
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</thead>
<tbody>
<tr>
<td>Goldman Sachs International</td>
<td>39.2%</td>
<td>A1</td>
<td>A+</td>
<td>A</td>
</tr>
<tr>
<td>Goldman Sachs Bank USA/New York NY</td>
<td>17.7%</td>
<td>A1</td>
<td>A+</td>
<td>A+</td>
</tr>
<tr>
<td>Barclays Bank PLC</td>
<td>12.8%</td>
<td>A2</td>
<td>A</td>
<td>A+</td>
</tr>
<tr>
<td>Deutsche Bank AG/London</td>
<td>10.3%</td>
<td>—</td>
<td>BBB+</td>
<td>BB</td>
</tr>
<tr>
<td>Morgan Stanley Capital Services LLC</td>
<td>8.7%</td>
<td>A1</td>
<td>A+</td>
<td>—</td>
</tr>
<tr>
<td>Chicago Mercantile Exchange Inc.</td>
<td>5.5%</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>HSBC Bank USA NA/New York NY</td>
<td>3.6%</td>
<td>Aa2</td>
<td>AA-</td>
<td>AA-</td>
</tr>
<tr>
<td>Morgan Stanley &amp; Co International PLC</td>
<td>1.3%</td>
<td>A1</td>
<td>A+</td>
<td>—</td>
</tr>
<tr>
<td>HSBC Securities Inc.</td>
<td>0.8%</td>
<td>—</td>
<td>AA-</td>
<td>—</td>
</tr>
<tr>
<td>Barclays Capital, Inc.</td>
<td>0.1%</td>
<td>—</td>
<td>A</td>
<td>—</td>
</tr>
<tr>
<td>Citigroup Global Markets Ltd.</td>
<td>0.1%</td>
<td>A1</td>
<td>A+</td>
<td>A</td>
</tr>
<tr>
<td>Citibank NA</td>
<td>0.1%</td>
<td>Aa3</td>
<td>A+</td>
<td>A+</td>
</tr>
</tbody>
</table>

**Total**

|                                                | 100.0%        |

130  Commonwealth of Virginia
Derivative instruments are classified as Level 1 and Level 2 in the fair value hierarchy. Derivative instruments classified as Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. The derivative instruments in Level 1 consist of futures contracts on commodities, eurodollars, U.S. Treasury bonds and notes, non-U.S. government bonds, and U.S. and non-U.S. equity indexes. Derivative instruments classified as Level 2 of the fair value hierarchy are valued using a number of modeling approaches that take into account observable market levels, benchmark rates, and foreign exchange rates.

Additional information is available in the System’s separately issued financial statements, which may be obtained from www.varetire.org.

Component Units

Investment Derivative Instruments

The Virginia Housing Development Authority (major component unit) enters into forward sales contracts for the delivery of GNMA and FNMA securities in order to lock in the sales price for the securitization of certain single-family mortgage loans. The contracts offset changes in interest rates between the time of the loan reservations and the securitization of such loans into GNMA and FNMA securities. These contracts are considered investment derivative instruments, such that their change in fair value is reported as investment derivative gains or losses in the accompanying financial statements. Fair values of the forwards are based on observable market prices for similar instruments traded on the secondary mortgage loan markets. The Authority’s portfolio of investment derivatives is classified as Level 2 in the fair value hierarchy. The outstanding forward contracts, summarized by counterparty rating as of June 30, 2019, were as follows:

<table>
<thead>
<tr>
<th>Counterparty Rating</th>
<th>Par</th>
<th>Concentration</th>
<th>Notional Amount</th>
<th>Market Value</th>
<th>Fair Value Asset (Liability)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-1+/AAA</td>
<td>$154,000,000</td>
<td>36.4%</td>
<td>$158,107,305</td>
<td>$158,738,438</td>
<td>(651,133)</td>
</tr>
<tr>
<td>A-1+/AAA</td>
<td>135,000,000</td>
<td>32.0%</td>
<td>139,088,301</td>
<td>139,663,078</td>
<td>(684,777)</td>
</tr>
<tr>
<td>A-1+/AAA</td>
<td>92,000,000</td>
<td>21.7%</td>
<td>94,283,344</td>
<td>94,756,406</td>
<td>(496,062)</td>
</tr>
<tr>
<td>A-1/AAA</td>
<td>16,000,000</td>
<td>3.8%</td>
<td>16,347,969</td>
<td>16,393,750</td>
<td>(45,781)</td>
</tr>
<tr>
<td>Res2BBB</td>
<td>26,000,000</td>
<td>6.1%</td>
<td>26,733,594</td>
<td>26,884,063</td>
<td>(150,469)</td>
</tr>
<tr>
<td></td>
<td>$423,900,000</td>
<td>100.0%</td>
<td>$439,529,315</td>
<td>$438,767,790</td>
<td>(2,218,222)</td>
</tr>
</tbody>
</table>

Investment Derivative Instruments – Ineffective Hedges

During fiscal year 2015, the University of Virginia (UVA) (nonmajor) refinanced the Series 2003A bonds and the commercial paper associated with the fixed-payer interest rate swaps which terminated hedge accounting. The fixed-payer interest rate swaps were no longer effective hedges. As of June 30, 2019, the negative fair value of the swaps of $35.1 million is included in other liabilities and the change in fair value of negative $9.9 million was reported as investment earnings in the accompanying financial statements. During fiscal year 2015, UVA established two fixed-receiver interest rate swaps with a total notional amount of $128.0 million to provide a hedge against fixed interest rates on Series 2015B bonds. These swaps were reevaluated as of June 30, 2016, and determined to no longer be effective hedges. As of June 30, 2019, the positive fair value of the fixed-receiver interest rate swaps of $140,265 is included in other assets and the change in fair value of positive $2.9 million is included in investment earnings in the accompanying financial statements. The derivative instruments are classified as Level 2 of the fair value hierarchy. Additional information regarding the institution’s derivative instruments is available at www.virginia.edu.

Hedging Derivative Instruments

At the beginning of the fiscal year, the Virginia Commonwealth University (VCU) (nonmajor) had two fixed-payer interest rate swaps with a notional amount of $51.8 million, which declines to $4.8 million at the termination date of November 1, 2030. The swaps were used as cash flow hedges by VCU in order to provide a hedge against changes in interest rates on a similar amount of VCU variable rate debt. The fair value of the swaps was calculated by Deutsche Bank using undisclosed proprietary methods. The swaps were entered into at a zero market value and no payments were made or received when they were initiated. In November 2018, VCU refunded its Series 2012A and 2012B bonds associated with the two fixed-payer interest rate swaps. At that time, the hedging relationship between the interest rate swap agreement and the bonds were terminated. At the time of termination, the fair market value of the swaps was $4.2 million. New bonds were issued to finance the termination payments of the two interest rate swaps associated with these bonds.

As of June 30, 2019 the Medical College of Virginia Hospitals (MCVH), which is a division of the Virginia Commonwealth University Health System Authority (a blended component unit of VCU), had two interest rate swap agreements with a notional amount of $115.8 million and another interest rate swap agreement with a notional amount of $61.3 million. The swaps are used as cash flow hedges by MCVH in order to provide a hedge against changes in interest rates on variable rate Series 2013A and 2013B bonds. The Series 2013A and 2013B bonds refunded prior Series 2005 and 2008 bonds that resulted in the termination of the prior hedging relationship between the interest rate swaps and the Series 2005 and 2008 bonds. At the time of the refunding in June 2013, the accumulated change in fair value of the interest rate swaps was negative $42.1 million and was included in the calculation of the deferred loss on refunding. There was also a reestablishment of hedge accounting on the new debt. As of June 30, 2019, the negative fair value of MCVH’s swaps of $45.2 million is included in other liabilities and the cumulative change in fair value of MCVH’s swaps of $3.1 million is included in deferred outflows of resources in the accompanying financial statements. The derivative instruments are classified as Level 2 of the fair value hierarchy. Additional information is available in the separately issued financial statements of the higher education institution.

Various foundations of higher education institutions have derivative instruments. The foundations follow FASB rather than GASB reporting requirements. Disclosures for the foundations’ derivatives can be found in the separately issued financial statements of the foundations.
17. RETIREMENT AND PENSION SYSTEMS

A separately issued financial report that includes financial statements and required supplemental information for each of the individual plans discussed below is publicly available. Copies may be obtained from the Virginia Retirement System website at www.varetire.org.

A. Administration

The Virginia Retirement System (the System) is an independent agency of the Commonwealth that administers pension plans, other employee benefit plans, and other funds for Commonwealth employees, teachers, political subdivision employees, and other qualifying employees. The Board of Trustees is responsible for the general administration and operation of the plans. The Board consists of five members appointed by the Governor and four members appointed by the Joint Rules Committee, all subject to confirmation by the General Assembly. The Board of Trustees appoints a director to serve as the chief administrative officer of the System and a chief investment officer to direct, manage, and administer the investment of the System’s funds. The Board of Trustees has appointed BNY Mellon as the custodian of designated assets of the System.

The System administers four pension trust funds: the Virginia Retirement System (VRS); State Police Officers’ Retirement System (SPORS); Virginia Law Officers’ Retirement System (VaLORS); and the Judicial Retirement System (JRS). In addition to the pension plans, the System administers five Other Employee Benefit Plans: Group Life Insurance Fund; Retiree Health Insurance Credit Fund; the Virginia Sickness and Disability Program (VSDP); the Line of Duty Act Trust Fund; and the Virginia Local Disability Program (VLDP).

B. Summary of Significant Accounting Policies (Virginia Retirement System)

Basis of Accounting

The financial statements of the pension and other employee benefit trust funds are prepared using the flow of economic resources measurement focus and the accrual basis of accounting consistent with the plans. Employee and employer contributions are recognized when due, pursuant to formal commitments, as well as statutory or contractual requirements. Investment income is recognized as earned by the plans. Benefits and refunds are recognized when due and payable in accordance with the terms of the plans.

Method Used to Value Investments

Investments are reported at fair value as determined by the System’s master custodian, BNY Mellon, from its Global Pricing System. This pricing system assigns a price source, based on asset type and the vendor pricing products to which the master custodian subscribes, for every security held immediately following its acquisition. Prices supplied by these sources are monitored on a daily basis by the master custodian.

When a pricing source is unable to provide a price, quotes are sought from major investment brokers and market-making dealers; or internal calculations are applied if feasible. As a last resort, the master custodian will contact investment managers for a price. The master custodian prices commingled funds, partnerships, and real estate assets from statements received from the funds, partnerships, or investment managers.

The pricing sources utilized by the master custodian provide daily prices for equity securities, corporate, government and mortgage-backed fixed income securities, private placement securities, futures and options on futures, open-ended funds, and foreign exchange rates. Depending on the vendor, collateralized mortgage obligations (CMOs), adjustable rate mortgages (ARMs) and asset-backed securities are priced daily, weekly or twice a month and at month-end. Municipal fixed income securities and options on Treasury/Government National Mortgage Association securities are priced at month-end.

The System’s investment guidelines for each specific portfolio limits investments in any corporate entity to no more than 5.0 percent of the market value of the account for both the internally and externally managed portfolios. There is no concentration of investments in any one organization that represents 5.0 percent or more of plan net position available for benefits.

C. Plan Description

The Virginia Retirement System (VRS) is a qualified governmental retirement plan that administers three retirement benefit structures: Plan 1, Plan 2, and Hybrid Plan, for state employees, public school board employees, employees of participating political subdivisions, and other qualifying employees. VRS is a combination of mixed-agent and cost-sharing, multiple-employer retirement plans. Each plan’s accumulated assets may legally be used to pay all the plan benefits provided to any of the plan’s members, retirees, and beneficiaries. Contributions for fiscal year 2019 were $3.4 billion with a reserve balance available for benefits of $77.4 billion. As of June 30, 2019, the VRS had 833 contributing employers.

The Commonwealth also administers the following single-employer retirement plans and benefit structures:

- State Police Officers’ Retirement System (SPORS) – Plan 1 and Plan 2
- Virginia Law Officers’ Retirement System (VaLORS) – Plan 1 and Plan 2
- Judicial Retirement System (JRS) – Plan 1, Plan 2, and Hybrid Plan

All full-time, salaried permanent employees of VRS participating employers are automatically covered under VRS, SPORS, VaLORS or JRS with the following exceptions: (1) certain full-time faculty and administrative staff of public colleges and universities; and (2) eligible classified employees of the two state teaching hospitals. These employees have the option to elect not to participate in the Virginia Retirement
Benefits vest for all plans after five years of service credit. Vested VRS members in the VRS Plan 1 are eligible for an unreduced retirement benefit at age 65 with at least five years of service credit or age 50 with at least 30 years of service credit as elected by the employer. Vested VRS members in the VRS Plan 2 and the Hybrid Plan are eligible for unreduced retirement benefits at normal social security retirement age with at least five years of service credit or when age and service credit equal 90. Vested SPORS and VaLORS members in both the VRS Plan 1 and the VRS Plan 2 are eligible for an unreduced benefit at age 60 with at least five years of hazardous duty service credit or age 50 with at least 25 years of total service credit.

Annual retirement benefits are payable monthly for life in an amount equal to 1.7 percent of eligible members’ average final compensation (AFC) for each year of service credit. Under the VRS Plan 2, the multiplier for general employees was reduced to 1.65 percent beginning January 1, 2013. Under the Hybrid Plan, the multiplier for the defined benefit component is 1.0 percent. AFC is the average of the member’s 36 consecutive months of highest creditable compensation for members under the VRS Plan 1. Under the VRS Plan 2 and the Hybrid Plan, a member’s AFC is the average of the member’s 60 consecutive months of highest creditable compensation. The benefit for members of SPORS is calculated using a 1.85 percent multiplier. Members of SPORS also are eligible for a hazardous duty supplement, paid monthly, until they reach full Social Security retirement age.

Members of VaLORS hired before July 1, 2001, were allowed to make a one-time election to increase the multiplier from 1.7 to 2.0 percent instead of receiving a monthly hazardous duty supplement. VaLORS members who elected to retain the 1.7 percent multiplier are eligible for the supplement until age 65. Members of VaLORS hired after June 20, 2001, have their benefit computed using the 2.0 percent multiplier and are not eligible for the supplement.

Members of JRS receive weighted years of service credit for each year of actual service under JRS. VRS, SPORS, VaLORS, and JRS also provide death and disability benefits.

A cost-of-living allowance (COLA), based on changes in the Consumer Price Index and limited to 5.0 percent per year for VRS Plan 1 and 3.0 percent for VRS Plan 2 and Hybrid Plan, is granted on July 1 of the second calendar year after retirement and is effective each July 1 thereafter. Beginning January 2013, a member who retires with less than 20 years of service must receive an allowance for one full calendar year after reaching unreduced retirement age to be eligible for a COLA. Members within five years of eligibility for an unreduced benefit as of January 1, 2013 were grandfathered.

Benefits for all vested members are actuarially reduced if they retire before becoming eligible for an unreduced retirement benefit, provided they meet age requirements for a reduced retirement benefit.

As required by Title 51.1 of the Code of Virginia, members contribute 5.0 percent of their annual compensation to the retirement plans. If a member leaves covered employment, the accumulated contributions plus earned interest may be refunded to the member. Each participating employer is required by state statute to contribute the remaining amounts necessary to fund the retirement plans using the entry age normal actuarial cost method adopted by the Board of Trustees. Contributions for fiscal year 2019 were $37.8 million, $27.5 million, and $93.2 million, and reserved balances available for benefits were $865.3 million, $563.5 million, and $1.5 billion, for SPORS, JRS, and VaLORS, respectively. State statute may be amended only by the General Assembly. To the extent that the employer’s long-term obligation to provide pension benefits (total pension liability) is larger than the value of the assets available in the plan to pay these benefits (fiduciary net position), there is a net pension liability which is reported in the accompanying financial statements as a component of Long-term Liabilities Due in More than One Year.

Further information about the benefits provided in these retirement plans and their different benefit structures can be found in the Virginia Retirement System’s Comprehensive Annual Financial Report.

The following table provides participant information:

<table>
<thead>
<tr>
<th></th>
<th>VRS</th>
<th>SPORS</th>
<th>VaLORS</th>
<th>JRS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retirees and Beneficiaries Receiving Benefits</td>
<td>58,797</td>
<td>1,410</td>
<td>4,991</td>
<td>530</td>
<td>65,728</td>
</tr>
<tr>
<td>Terminated Employees Entitled to Benefits but not Receiving Them</td>
<td>11,707</td>
<td>143</td>
<td>771</td>
<td>7</td>
<td>12,628</td>
</tr>
<tr>
<td>Total</td>
<td>70,504</td>
<td>1,553</td>
<td>5,762</td>
<td>537</td>
<td>78,356</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>VRS</th>
<th>SPORS</th>
<th>VaLORS</th>
<th>JRS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Members:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vested</td>
<td>52,123</td>
<td>1,579</td>
<td>4,806</td>
<td>348</td>
<td>58,856</td>
</tr>
<tr>
<td>Non-Vested</td>
<td>24,887</td>
<td>333</td>
<td>3,928</td>
<td>109</td>
<td>29,257</td>
</tr>
<tr>
<td>Total</td>
<td>77,010</td>
<td>1,912</td>
<td>8,734</td>
<td>457</td>
<td>88,113</td>
</tr>
</tbody>
</table>

D. Funding Policy

The funding policy of the retirement plans provides for periodic employer contributions at actuarily determined rates, which will remain relatively level over time as a percentage of payroll and will accumulate sufficient assets to meet the cost of all basic benefits when due. Contribution rates are developed using the entry age normal cost method for both normal cost and amortization of the unfunded actuarial accrued liability. Gains and losses are reflected in the unfunded actuarial accrued liability that is being amortized as a level percentage of payroll within 30 years or less.

The System’s actuary, Cavanaugh MacDonald Consulting, LLC, computed the amount of contributions to be provided by state agency employers, state police and other Virginia law employers. The contribution rates
for fiscal year 2019 were based on the actuary’s valuation as of June 30, 2017. Employer contributions by the Commonwealth to VRS, SPORS, VaLORS, and JRS were 13.5 percent, 24.9 percent, 21.6 percent, and 34.4 percent, respectively.

In addition to determining contribution requirements, the actuarial computations present an estimate of the discounted present value of the prospective accrued liability contributions that employers will have to pay in the future so that such contributions, together with the assets on hand, the normal contributions to be made in the future by employers and members and the income earned by investing funds, will be sufficient to provide all benefits to be paid to present members in the future as well as the annuitants and their designated beneficiaries.

### E. Changes in Net Pension Liability

The total pension liability was determined based on the actuarial valuation as of June 30, 2017, using updated actuarial assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2018. The following tables (dollars in thousands) show the Commonwealth’s total pension liability, plan fiduciary net position, and net pension liability in total and individually for the VRS, SPORS, JRS, and VaLORS for the current and prior year.

#### Primary Government

<table>
<thead>
<tr>
<th>Totals (1)</th>
<th>Increase (Decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Pension Liability (a)</td>
<td>Plan Fiduciary Net Position (b)</td>
</tr>
<tr>
<td>Balances at June 30, 2018</td>
<td>$16,625,511</td>
</tr>
<tr>
<td>Changes for the year</td>
<td></td>
</tr>
<tr>
<td>Service cost</td>
<td>287,906</td>
</tr>
<tr>
<td>Interest</td>
<td>1,133,490</td>
</tr>
<tr>
<td>Differences between actual and expected experience</td>
<td>(228,970)</td>
</tr>
<tr>
<td>Assumption changes</td>
<td>—</td>
</tr>
<tr>
<td>Contributions - employer</td>
<td>—</td>
</tr>
<tr>
<td>Contributions - member</td>
<td>—</td>
</tr>
<tr>
<td>Net investment income</td>
<td>—</td>
</tr>
<tr>
<td>Benefit payments, including refunds</td>
<td>(902,389)</td>
</tr>
<tr>
<td>Administrative expense</td>
<td>—</td>
</tr>
<tr>
<td>Other changes</td>
<td>(78)</td>
</tr>
<tr>
<td>Net changes</td>
<td>289,959</td>
</tr>
<tr>
<td>Balances at June 30, 2019</td>
<td>$16,915,470</td>
</tr>
</tbody>
</table>

#### VRS

<table>
<thead>
<tr>
<th>Increase (Decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Pension Liability (a)</td>
</tr>
<tr>
<td>Balances at June 30, 2018</td>
</tr>
<tr>
<td>Changes for the year</td>
</tr>
<tr>
<td>Service cost</td>
</tr>
<tr>
<td>Interest</td>
</tr>
<tr>
<td>Differences between actual and expected experience</td>
</tr>
<tr>
<td>Assumption changes</td>
</tr>
<tr>
<td>Contributions - employer</td>
</tr>
<tr>
<td>Contributions - member</td>
</tr>
<tr>
<td>Net investment income</td>
</tr>
<tr>
<td>Benefit payments, including refunds</td>
</tr>
<tr>
<td>Administrative expense</td>
</tr>
<tr>
<td>Other changes</td>
</tr>
<tr>
<td>Net changes</td>
</tr>
<tr>
<td>Balances at June 30, 2019</td>
</tr>
</tbody>
</table>

#### SPORS

<table>
<thead>
<tr>
<th>Increase (Decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Pension Liability (a)</td>
</tr>
<tr>
<td>Balances at June 30, 2018</td>
</tr>
<tr>
<td>Changes for the year</td>
</tr>
<tr>
<td>Service cost</td>
</tr>
<tr>
<td>Interest</td>
</tr>
<tr>
<td>Differences between actual and expected experience</td>
</tr>
<tr>
<td>Assumption changes</td>
</tr>
<tr>
<td>Contributions - employer</td>
</tr>
<tr>
<td>Contributions - member</td>
</tr>
<tr>
<td>Net investment income</td>
</tr>
<tr>
<td>Benefit payments, including refunds</td>
</tr>
<tr>
<td>Administrative expense</td>
</tr>
<tr>
<td>Other changes</td>
</tr>
<tr>
<td>Net changes</td>
</tr>
<tr>
<td>Balances at June 30, 2019</td>
</tr>
</tbody>
</table>
### JRS VaLORS

<table>
<thead>
<tr>
<th></th>
<th>Increase (Decrease)</th>
<th></th>
<th>Increase (Decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Pension Liability (a)</td>
<td>Plan Fiduciary Net Position (b)</td>
<td>Net Pension Liability (a) - (b)</td>
</tr>
<tr>
<td>Balances at June 30, 2018</td>
<td>$ 646,275</td>
<td>$ 512,749</td>
<td>$ 133,526</td>
</tr>
<tr>
<td>Changes for the year</td>
<td>Service cost</td>
<td>Interest</td>
<td>Differences between actual and expected experience</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>—</td>
<td>19,228</td>
</tr>
<tr>
<td></td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td></td>
<td>19,228</td>
<td>43,799</td>
<td>(15,786)</td>
</tr>
<tr>
<td></td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Net changes</td>
<td>$ 6,076</td>
<td>$ 27,260</td>
<td>(21,184)</td>
</tr>
</tbody>
</table>

### VaLORS

<table>
<thead>
<tr>
<th></th>
<th>Increase (Decrease)</th>
<th></th>
<th>Increase (Decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Pension Liability (a)</td>
<td>Plan Fiduciary Net Position (b)</td>
<td>Net Pension Liability (a) - (b)</td>
</tr>
<tr>
<td>Balances at June 30, 2018</td>
<td>$ 1,840,435</td>
<td>$ 1,237,158</td>
<td>$ 603,277</td>
</tr>
<tr>
<td>Changes for the year</td>
<td>Service cost</td>
<td>Interest</td>
<td>Differences between actual and expected experience</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>41,436</td>
<td>124,998</td>
<td>(23,948)</td>
</tr>
<tr>
<td></td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td></td>
<td>19,228</td>
<td>43,799</td>
<td>(15,786)</td>
</tr>
<tr>
<td></td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Net changes</td>
<td>$ 6,076</td>
<td>$ 27,260</td>
<td>(21,184)</td>
</tr>
</tbody>
</table>

### Component Units

<table>
<thead>
<tr>
<th></th>
<th>Increase (Decrease)</th>
<th></th>
<th>Increase (Decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Pension Liability (a)</td>
<td>Plan Fiduciary Net Position (b)</td>
<td>Net Pension Liability (a) - (b)</td>
</tr>
<tr>
<td>Balances at June 30, 2018</td>
<td>$ 10,687,840</td>
<td>$ 8,037,539</td>
<td>$ 2,650,301</td>
</tr>
<tr>
<td>Changes for the year</td>
<td>Service cost</td>
<td>Interest</td>
<td>Differences between actual and expected experience</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>170,653</td>
<td>724,621</td>
<td>147,464</td>
</tr>
<tr>
<td></td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td></td>
<td>170,653</td>
<td>724,621</td>
<td>147,464</td>
</tr>
<tr>
<td></td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Net changes</td>
<td>$ 112,551</td>
<td>$ 307,832</td>
<td>(195,281)</td>
</tr>
</tbody>
</table>

Balances at June 30, 2019 | $ 10,800,391 | $ 8,345,371 | $ 2,455,020 |
### VRS and VaLORS

<table>
<thead>
<tr>
<th></th>
<th>Increase (Decrease)</th>
<th></th>
<th>Increase (Decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Pension Liability</td>
<td>Plan Fiduciary Net Position</td>
<td>Net Pension Liability</td>
</tr>
<tr>
<td>(a)</td>
<td>(b)</td>
<td>(a) - (b)</td>
<td>(a)</td>
</tr>
<tr>
<td>Changes for the year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service cost</td>
<td>166,910</td>
<td>—</td>
<td>166,910</td>
</tr>
<tr>
<td>Interest</td>
<td>713,330</td>
<td>—</td>
<td>713,330</td>
</tr>
<tr>
<td>Differences between actual and expected experience</td>
<td>(145,301)</td>
<td>—</td>
<td>(145,301)</td>
</tr>
<tr>
<td>Assumption changes</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Contributions - employer</td>
<td>—</td>
<td>243,356</td>
<td>243,356</td>
</tr>
<tr>
<td>Contributions - member</td>
<td>—</td>
<td>89,643</td>
<td>89,643</td>
</tr>
<tr>
<td>Net investment income</td>
<td>—</td>
<td>578,132</td>
<td>578,132</td>
</tr>
<tr>
<td>Benefit payments, including refunds</td>
<td>(630,234)</td>
<td>(620,095)</td>
<td>(10,139)</td>
</tr>
<tr>
<td>Administrative expense</td>
<td>—</td>
<td>(5,097)</td>
<td>5,097</td>
</tr>
<tr>
<td>Other changes</td>
<td>—</td>
<td>12,654</td>
<td>(12,654)</td>
</tr>
<tr>
<td>Net changes</td>
<td>104,705</td>
<td>298,593</td>
<td>(193,888)</td>
</tr>
<tr>
<td>Balances at June 30, 2019</td>
<td>$10,630,796</td>
<td>$8,227,403</td>
<td>$2,403,393</td>
</tr>
</tbody>
</table>

The amounts in the previous tables include governmental, business-type, and component unit activity for the Commonwealth’s VRS State Plan and the fiduciary net pension liability of $65,845. All component unit tables exclude the non-VRS State Plan net pension liability of $35.8 million for all component units.

The 2017 actuarial valuations were prepared using the entry age normal cost method. The actuarial assumptions included (a) 7.0 percent investment rate of return, per year compounded annually; (b) projected salary increases ranging from 3.5 percent to 6.0 percent, including a 2.5 percent inflation component and (c) COLA of 2.5 percent for Plan 1 and 2.3 percent for Plan 2. The actuarial assumption for mortality rates was based on the RP-2014 mortality table projected with Scale BB to 2020. The projection of benefits for financial reporting purposes does not explicitly incorporate the potential effects of legal or contractual funding limitations.

For more detailed actuarial information, refer to the Virginia Retirement System’s financial statements, including mortality rates shown in the “Actuarial Assumptions and Methods – Pension Plans” schedule.

### F. Changes to and Sensitivity of Discount Rate

The discount rate used to measure the total pension liability was 7.0 percent. The projection of cash flows used to determine the discount rate assumed that contributions from participating employers will be based on the actuarially determined rates based on the Board’s funding policy, which certifies the required rates under Title 51.1 of the Code of Virginia. Beginning on July 1, 2018, all agencies are assumed to contribute 100.0 percent of the actuarially determined contribution rates. Based on those assumptions, the fiduciary net position was projected to be available to make all of the projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of the projected benefit payments to determine the total pension liability. In accordance with GASB Statement No. 67, Financial Reporting for Pension Plans – an amendment of GASB Statement No. 25, regarding the disclosure of the sensitivity of the net pension liability to changes in the discount rate, the table below presents the employers’ net pension liability for each of the plans calculated using the discount rate of 7.0 percent, as well as what the employers’ net pension liability would be if it were calculated using a discount rate that is 1.0 percent lower (6.0 percent) or 1.0 percent higher (8.0 percent) than the current rate. The following table (dollars in thousands) shows the Commonwealth’s changes in the discount rate.
The long-term expected rate of return on the System’s investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of 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 allocations are based on the Strategic Asset Allocation Implementation Schedule and Allowable Ranges document, which was approved by the VRS Board of Trustees on June 7, 2016. Best estimates of arithmetic real rates of return for each major asset class included in the System’s target asset allocation are summarized in the following table.

<table>
<thead>
<tr>
<th>Asset Class (Strategy)</th>
<th>Target Allocation</th>
<th>Arithmetic Long-Term Expected Rate of Return</th>
<th>Weighted Average Long-Term Expected Rate of Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Equity</td>
<td>40.0%</td>
<td>4.5%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Fixed Income</td>
<td>15.0%</td>
<td>0.7%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Credit Strategies</td>
<td>15.0%</td>
<td>4.0%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Real Estate</td>
<td>15.0%</td>
<td>5.8%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Private Equity</td>
<td>15.0%</td>
<td>9.5%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>4.8%</td>
<td></td>
</tr>
<tr>
<td>Inflation</td>
<td></td>
<td>2.5%</td>
<td></td>
</tr>
<tr>
<td>Expected arithmetic nominal return</td>
<td></td>
<td>7.3%</td>
<td></td>
</tr>
</tbody>
</table>

G. Pension Related Deferred Outflows and Deferred Inflows

GASB Statement No. 68, Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27, requires certain pension related items to be reported as either deferred outflows or deferred inflows of resources. The following tables (dollars in thousands) summarize these amounts as of June 30, 2019, in total and by individual plan.
## Primary Government (1)

<table>
<thead>
<tr>
<th>Differences between expected and actual experience</th>
<th>Deferred Outflows of Resources</th>
<th>Deferred Inflows of Resources</th>
<th>Totals (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ 383</td>
<td>$ 236,256</td>
<td>$ 542,170</td>
</tr>
<tr>
<td>Changes of assumptions</td>
<td>27,857</td>
<td>68,271</td>
<td>96,128</td>
</tr>
<tr>
<td>Net difference between projected and actual earnings on plan investments</td>
<td>—</td>
<td>97,907</td>
<td>97,907</td>
</tr>
<tr>
<td>Changes in proportion and difference between employer contributions and proportionate share of contributions</td>
<td>92,608</td>
<td>86,444</td>
<td>179,052</td>
</tr>
<tr>
<td>Employer contributions subsequent to the Measurement Date</td>
<td>421,322</td>
<td>—</td>
<td>421,322</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$ 542,170</strong></td>
<td><strong>$ 488,878</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VRS</th>
<th>Deferred Outflows of Resources</th>
<th>Deferred Inflows of Resources</th>
<th>SPORS</th>
<th>Deferred Outflows of Resources</th>
<th>Deferred Inflows of Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differences between expected and actual experience</td>
<td>$ —</td>
<td>$ 182,002</td>
<td>$ —</td>
<td>$ 17,933</td>
<td></td>
</tr>
<tr>
<td>Changes of assumptions</td>
<td>20,157</td>
<td>—</td>
<td>—</td>
<td>48,229</td>
<td></td>
</tr>
<tr>
<td>Net difference between projected and actual earnings on plan investments</td>
<td>—</td>
<td>78,615</td>
<td>—</td>
<td>5,832</td>
<td></td>
</tr>
<tr>
<td>Changes in proportion and difference between employer contributions and proportionate share of contributions</td>
<td>78,876</td>
<td>70,639</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Employer contributions subsequent to the Measurement Date</td>
<td>297,719</td>
<td>—</td>
<td>31,469</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$ 396,752</strong></td>
<td><strong>$ 331,256</strong></td>
<td><strong>$ 31,469</strong></td>
<td><strong>$ 71,994</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JRS</th>
<th>Deferred Outflows of Resources</th>
<th>Deferred Inflows of Resources</th>
<th>VaLORS</th>
<th>Deferred Outflows of Resources</th>
<th>Deferred Inflows of Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differences between expected and actual experience</td>
<td>$ —</td>
<td>$ 20,221</td>
<td>$ 354</td>
<td>$ 16,096</td>
<td></td>
</tr>
<tr>
<td>Changes of assumptions</td>
<td>7,700</td>
<td>—</td>
<td>—</td>
<td>20,038</td>
<td></td>
</tr>
<tr>
<td>Net difference between projected and actual earnings on plan investment</td>
<td>—</td>
<td>4,045</td>
<td>—</td>
<td>9,414</td>
<td></td>
</tr>
<tr>
<td>Changes in proportion and difference between employer contributions and proportionate share of contributions</td>
<td>—</td>
<td>—</td>
<td>13,732</td>
<td>15,805</td>
<td></td>
</tr>
<tr>
<td>Employer contributions subsequent to the Measurement Date</td>
<td>22,899</td>
<td>—</td>
<td>69,200</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$ 30,599</strong></td>
<td><strong>$ 24,266</strong></td>
<td><strong>$ 83,286</strong></td>
<td><strong>$ 61,353</strong></td>
<td></td>
</tr>
</tbody>
</table>
### Component Units (1) (3)

<table>
<thead>
<tr>
<th></th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Deferred Outflows of Resources</td>
</tr>
<tr>
<td>Differences between expected and actual experience</td>
<td>$29</td>
</tr>
<tr>
<td>Changes of assumptions</td>
<td>16,086</td>
</tr>
<tr>
<td>Net difference between projected and actual earnings on plan investments</td>
<td>—</td>
</tr>
<tr>
<td>Changes in proportion and difference between employer contributions and proportionate share of contributions</td>
<td>48,882</td>
</tr>
<tr>
<td>Employer contributions subsequent to the Measurement Date</td>
<td>255,194</td>
</tr>
<tr>
<td>Total</td>
<td>$320,191</td>
</tr>
</tbody>
</table>

**VRS**

<table>
<thead>
<tr>
<th></th>
<th>VRS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Deferred Outflows of Resources</td>
</tr>
<tr>
<td>Differences between expected and actual experience</td>
<td>$ —</td>
</tr>
<tr>
<td>Changes of assumptions</td>
<td>16,086</td>
</tr>
<tr>
<td>Net difference between projected and actual earnings on plan investments</td>
<td>—</td>
</tr>
<tr>
<td>Changes in proportion and difference between employer contributions and proportionate share of contributions</td>
<td>46,129</td>
</tr>
<tr>
<td>Employer contributions subsequent to the Measurement Date</td>
<td>248,760</td>
</tr>
<tr>
<td>Total</td>
<td>$310,975</td>
</tr>
</tbody>
</table>

**VaLORS**

<table>
<thead>
<tr>
<th></th>
<th>VaLORS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Deferred Outflows of Resources</td>
</tr>
<tr>
<td>Differences between expected and actual experience</td>
<td>$ —</td>
</tr>
<tr>
<td>Changes of assumptions</td>
<td>—</td>
</tr>
<tr>
<td>Net difference between projected and actual earnings on plan investments</td>
<td>—</td>
</tr>
<tr>
<td>Changes in proportion and difference between employer contributions and proportionate share of contributions</td>
<td>2,753</td>
</tr>
<tr>
<td>Employer contributions subsequent to the Measurement Date</td>
<td>6,434</td>
</tr>
<tr>
<td>Total</td>
<td>$9,216</td>
</tr>
</tbody>
</table>

(1) During fiscal year 2019, the Commonwealth recognized pension expense for the primary government and component units of $152,150 (dollars in thousands) and $103,122 (dollars in thousands), respectively. The recognized pension expense by plan for the primary government was as follows (dollars in thousands): VRS $111,767, SPORS $5,524, JRS $10,088, and VaLORS $24,771. The recognized pension expense by plan for component units was as follows (dollars in thousands): VRS $98,487, and VaLORS $4,635.

(2) This table includes deferred outflows of resources and deferred inflows of resources of $64,054 and $9,289, respectively, for the Hampton Roads Transportation Accountability Commission (nonmajor governmental), not related to the VRS State Plan.

(3) The component unit amounts exclude deferred outflows of resources and deferred inflows of resources of $20,066 (dollars in thousands) and $10,679 (dollars in thousands), respectively, not related to the VRS State Plan.
I. Defined Contribution Plan for Public School Superintendents

The Public School Superintendent Plan is a defined contribution pension plan that provides optional postemployment benefits for school superintendents. This plan is authorized by the Code of Virginia. The Board of Trustees of the System manages the investments of the fund as custodian. School boards may elect to offer this plan as an option to the standard VRS plan that is available for school board members. Contributions are provided by the school board for credit to the member. As of June 30, 2019, there were two participants in this plan. There were no contributions to the plan for fiscal year 2019.

J. Virginia Supplemental Retirement Plan

The Public School Teacher Supplemental Retirement Plan is a defined contribution pension plan established by the Department of Education to provide an optional postemployment benefit plan for turnaround specialists in the public school system. This plan is utilized as an incentive to attract highly skilled teachers for participating public schools pursuant to Title 51.1-617 of the Code of Virginia. The Board of Trustees of the System manages the investments of the fund as custodian. School boards may elect to offer this plan as an option to the standard VRS plan that is available for school board members. Contributions are provided by the school boards for credit to the members. As of June 30, 2019, there were two participants in this plan. There were no contributions to the plan for fiscal year 2019.

K. Higher Education (Nonmajor Component Units)

The Commonwealth’s colleges and universities participate in the retirement plans administered by VRS. In addition, full-time faculty and certain administrative staff of the Commonwealth’s colleges and universities may participate in optional retirement plans as authorized by Section 51.1-126 of the Code of Virginia rather than the VRS retirement plans. These optional retirement plans are defined contribution plans offered through the Teachers Insurance and Annuity Association (TIAA), Fidelity Investments, and DCP. There are two defined contribution plans. Plan 1 is for employees hired prior to July 1, 2010, and retirement benefits received are based upon the employer’s 10.4 percent contributions, plus net investment gains. For Plan 2, the employer contributions for fiscal year 2019 were 8.5 percent except for the University of Virginia (nonmajor) which were 8.9 percent. Vesting is full and immediate for both employer and employee contributions, except UVA employees hired after July 1, 2014 are fully vested in the UVA contributions after two years of continuous employment. For fiscal year 2019, total pension expense recognized was $164.5 million and contributions were calculated using the base salary amount of $1.7 billion. As of June 30, 2019, the Commonwealth’s colleges and universities had accrued $10.7 million in employer liabilities related to these plans.

University of Virginia Medical Center (part of the University of Virginia – nonmajor) employees hired after July 1, 1999, cannot participate in Plan 1 or Plan 2 noted above but have the option of participating in the Medical Center’s Optional Retirement Plan. For information regarding this plan, see the institution’s separately issued financial statements.
Certain employees of Virginia Commonwealth University (nonmajor) are participating in The Select Plan, which is a 401(a) defined contribution plan. Participation is limited to executives by invitation. For information regarding this plan, see the University’s website at www.vcu.edu.

Prior to July 1, 1997, certain employees of the Virginia Commonwealth University Health System Authority (Authority) (a blended component unit of Virginia Commonwealth University – nonmajor) were eligible to participate in the VRS defined benefit pension plan. Effective July 1, 1997, the Authority established the Virginia Commonwealth University Health System Authority Defined Contribution Plan (VCUHS 401(a) Plan) and the Virginia Commonwealth University Health System Authority Health Care Providers Defined Contribution Plan (HCP Plan). The Authority and component units, MCV Associated Physicians (MCVAP), VCU Community Memorial Hospital (CMH), and the Children’s Hospital (Children’s), participate in the VCUHS 401(a) as well as sponsor the VCUHS Savings Plan (VCUHS 457(b) Plan). Healthcare providers hired between July 1, 1993 and July 1, 1997, are eligible to participate in the HCP Plan. MCVAP also sponsors the MCVAP 401(a) Retirement Plan. VA Premier (a component of the Authority) adopted a 401(k) Plan. For information regarding these plans, see the Authority’s separately issued financial statements.

The Center for Innovative Technology (CIT) is a blended component unit of the Innovation and Entrepreneurship Investment Authority (nonmajor). The CIT has a defined contribution retirement plan covering substantially all employees. Under the plan, CIT makes contributions fixed at a percentage of each employee’s compensation to pay premiums for individual retirement annuity contracts written by the Teachers Insurance and Annuity Association (TIAA) and the College Retirement Equities Fund (CREF). For information regarding this plan, see the Authority’s separately issued financial statements.

L. Other Component Units

Note 1.B. outlines the component units included in the Commonwealth’s reporting entity. The Virginia Public Building Authority (blended - primary government), the Virginia Public School Authority (major), the Virginia College Building Authority (major), and the Virginia School for the Deaf and Blind Foundation (nonmajor) have no employees. Virginia Resources Authority (major) and the following nonmajor component units participate in the retirement plans administered by VRS: the Virginia Economic Development Partnership, the Virginia Small Business Financing Authority, the Hampton Roads Sanitation District Commission, the Virginia Biotechnology Research Partnership Authority, the Virginia Tourism Authority, the Tobacco Region Revitalization Commission, the Virginia Foundation for Healthy Youth, and the Fort Monroe Authority.

The Virginia Housing Development Authority (major) has three defined contribution plans. For additional information regarding these plans, see the Authority’s website at www.vhda.com.

The Virginia Outdoors Foundation (nonmajor) maintains a 401(k) contribution plan and provides an employer contribution match up to 6.0 percent. For information regarding this plan, see the Foundation’s website at www.virginiaoutdoorsfoundation.org.

The Virginia Commercial Space Flight Authority (nonmajor) maintains a 401(a) contribution plan and provides an employer contribution to all eligible employees of 11.0 percent of their base salary. For information regarding this plan, see the Authority’s separately issued financial statements.

The Virginia Port Authority (VPA) (nonmajor) maintains two defined benefit plans for its employees. Employees of record on July 1, 1997, had the option of continuing to maintain their benefit status as a State employee, and their benefits maintained under the VRS, or elect to be covered under a newly created pension plan (the VPA Defined Benefit Plan). The VPA Defined Benefit Plan covers all employees hired between July 1, 1997 and February 1, 2014. Employees hired after February 1, 2014, are eligible for a defined contribution plan only. On January 1, 2015, the plan was amended to add certain employees who transferred from the Virginia International Terminals (VIT) (referred to as “Legacy VIT Participants”) to VPA. VIT (a blended component unit of VPA – nonmajor) has the Virginia International Terminals, LLC Pension Plan that is a single employer, noncontributory defined benefit pension plan administered by VIT. A stand-alone financial report is issued by VITPP and is available upon request from VPA’s administrative offices. For information regarding these plans, see the Authority’s website at www.portofvirginia.com.

Employees of the Virginia Museum of Fine Arts Foundation (nonmajor) who are age 21 or older are eligible to participate in the Employee’s Savings Plan, a 401(k) defined contribution profit sharing plan. Also, the Foundation entered into a supplemental retirement agreement to pay a key employee of the Museum upon retirement the difference between the amount accrued under the VRS retirement plan, based on salary, and the amount based on the supplemental salary. For additional information regarding these plans, see the Foundation’s separately issued financial statements.

The Science Museum of Virginia Foundation (nonmajor) has a 403(b) defined contribution pension plan through the TIAA-CREF Retirement Plan for employees meeting age and service requirements. For additional information regarding this plan, see the Foundation’s separately issued financial statements.

18. OTHER EMPLOYMENT BENEFITS

In addition to the pension plans, the Commonwealth participates in two other employment benefit plans, Group Life Insurance and the Virginia Sickness and Disability Program, which are administered by the Virginia Retirement System (the System). The System administers a third other employment benefit plan, the Volunteer Firefighters’ and Rescue Squad Workers’ Fund, in which the Commonwealth does not participate, but may provide funding. The
Group Life Insurance

The Group Life Insurance Plan was established for Commonwealth employees, teachers, employees of political subdivisions participating in the VRS, state police officers, other state law enforcement and correctional officers, judges, and other qualifying employees. The program provides life insurance for natural death coverage equal to a member’s annual compensation rounded to the next highest $1,000 and then doubled. Accidental death coverage is double the natural death benefit. The program also provides coverage for accidental dismemberment and accidental blindness, a safety belt benefit, a repatriation benefit, a felonious assault benefit and an accelerated death benefit for terminal conditions. Approximately 369,831 members participate in the program as of June 30, 2019.

Participating employers and their covered employees are required by Title 51.1 of the Code of Virginia to contribute to the cost of group life insurance benefits. Employers may assume the employees’ contributions.

An optional Group Life Insurance Fund was established for members covered under the group life program as a supplement to that plan. Members may purchase optional life insurance coverage for themselves, their spouses and/or their dependent children. The optional program provides natural death coverage equal to one, two, three or four times the member’s annual compensation rounded to the next highest $1,000, up to a maximum of $750,000. Spouse coverage is available for up to one-half of the member’s optional insurance amount. Minor children who are at least 15 days old can be insured for $10,000, $20,000 or $30,000, depending on the option chosen by the member. An additional accidental death and dismemberment benefit is payable for death or bodily injuries. Approximately 70,903 members were covered under this program as of June 30, 2019.

Optional group life insurance coverage ends for members when they retire or terminate their employment, or when their basic coverage ends. Optional life insurance amounts begin to reduce by 25.0 percent based on the retiree’s age, beginning with the retiree’s normal retirement age under his or her plan ending at age 80. Retirees may elect to continue coverage within 31 days of retirement. Spouse coverage terminates should a couple divorce or when the member leaves employment. Children’s coverage ends with the termination of the member’s coverage or when the child marries or turns 21 years of age (25 years of age for full-time college students).

Employers of members who elect optional life insurance coverage deduct the premiums from the members’ paychecks, as required by Title 51.1 of the Code of Virginia. Premiums are based on the member’s age and determined by the Board of Trustees. Because optional life insurance is an insured product, the carrier bills each employer directly, and the employer makes the contribution payments to the carrier. Any differences and adjustments are settled between the employer and the carrier.

Virginia Sickness and Disability Program

The System administers the Virginia Sickness and Disability Program (VSDP) to provide income protection in the event of a disability for eligible state employees hired on or after January 1, 1999. State agencies are required by Title 51.1 of the Code of Virginia to contribute to the cost of providing long-term disability benefits and administering the program.

VSDP benefits include sick, family and personal leave and short-term and long-term disability benefits. After a seven-calendar day waiting period following the first day of disability, eligible employees receive short-term disability benefits from 60.0 percent to 100.0 percent of their compensation. After 125 work days of short-term disability, eligible employees receive long-term disability benefits equal to 60.0 percent of their compensation. If the employee’s condition becomes catastrophic, income replacement increases to 80.0 percent until the condition is no longer catastrophic. Long-term disability benefits continue until employees return to work, retire or reach age 65 (age 60 for state police officers and other state law enforcement and correctional officers) or die.

Full-time permanent salaried state employees, including state police officers and other Virginia law and correctional officers, are automatically enrolled in the VSDP. Part-time permanent salaried state employees who work at least 20 hours a week and accrue leave also are automatically enrolled. Teaching, administrative and research faculty of Virginia public colleges and universities who elect VRS as their retirement plan must make an irrevocable election to participate in either the VSDP or the institution’s disability program. If there is no institution program, the faculty member is covered under VSDP.

Eligible state employees and state police officers employed before January 1, 1999, had the option to elect to participate in the VSDP or remain under the Commonwealth’s existing sick leave program and retain their eligibility for disability retirement benefits under VRS and SPORS. (Members of VaLORS have been automatically enrolled in the VSDP since October 1, 1999, when VaLORS was created.) Eligible employees enrolled in the VSDP are not eligible for disability retirement benefits under VRS, SPORS, or VaLORS. Employees hired or rehired on or after July 1, 2009, must satisfy eligibility periods before becoming eligible for non-work related short-term disability coverage and certain income replacement levels. Approximately 79,269 members were covered under the program as of June 30, 2019.

Volunteer Firefighters’ and Rescue Squad Workers’ Fund

Volunteer firefighters and rescue squad workers may participate in an optional employment benefit plan. This optional plan is authorized by the Code of Virginia. The Board of Trustees of the System manages the investments of the fund as custodian. Members of the plan contribute $30 per quarter. The Commonwealth will contribute an amount determined by the Board and appropriated by the Board of Trustees.
General Assembly, if such funds are appropriated, for a period not to exceed 20 years. For fiscal year 2019, there was $185,000 appropriated for administration of the program. As of June 30, 2019, there were 1,814 workers participating in the fund.

19. OTHER POSTEMPLOYMENT BENEFITS (OPEB)

A. Virginia Retirement System (System-administered) OPEB Plans

1) Administration and Significant Accounting Policies

The System-administered defined benefit OPEB plans mentioned below have a trust that meets the requirements in GASB Statement No. 75. In addition, the net OPEB liability for these plans have a measurement date of June 30, 2018. As previously mentioned, a separately issued financial report that includes financial statements, notes and required supplementary information for each of the System-administered plans discussed below is publicly available. Copies may be obtained from the Virginia Retirement System website at www.varetire.org.

The administration and significant accounting policies for the System-administered OPEB plans are the same as those described in Note 17 for pension plans.

2) Plan Descriptions

Retiree Health Insurance Credit Program

The Retiree Health Insurance Credit Program is composed of a single-employer plan for state employees; a cost-sharing multiple-employer plan for teachers; three cost-sharing, multiple-employer plans for constitutional officers, social services employees and registrars; and an agent, multiple-employer plan for political subdivisions electing coverage. This note and the required supplementary information in this report is for the single-employer plan for state employees and also includes the state-funded noncontributing employer portion for constitutional officers, registrars, and their employees, as well as local social service employees.

The Retiree Health Insurance Credit (RHIC) for state employees provides benefits for retired state employees, state police officers, other state law enforcement, correctional officers, and judges who have at least 15 years of service credit under the retirement plans. Members of JRS receive weighted years of service credit for each year of actual service under JRS. VRS, SPORS, VaLORS, and JRS also provide death and disability benefits. The program provides a credit reimbursement of $4 per month per year of service credit against the monthly health insurance premiums of eligible retirees. There is no cap on the credit. Certain eligible employees who retire on disability or go on long-term disability under the Virginia Sickness and Disability Program are eligible for a credit not to exceed $120.

The following is the approximate number of employees covered by the RHIC plan for state employees on the measurement date of June 30, 2018:

<table>
<thead>
<tr>
<th>RHIC for State Employees</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Inactive employees currently receiving benefit payments</td>
<td>46,289</td>
</tr>
<tr>
<td>Inactive employees entitled to but not yet receiving benefit payments</td>
<td>1,715</td>
</tr>
<tr>
<td>Active employees</td>
<td>108,027</td>
</tr>
<tr>
<td>Total</td>
<td>156,031</td>
</tr>
</tbody>
</table>

The health insurance credit plan for general registrars, constitutional officers, and their employees as well as local social service employees (RHIC Non-State) provides $1.50 per month per year of service with a maximum monthly credit of $45. The Commonwealth funds this credit. Benefit provisions and eligibility requirements are established by Title 51.1 of the Code of Virginia. The amount required to fund all credits is financed by the employers based on contribution rates determined by the System’s actuary.

Virginia Sickness and Disability Program

The Virginia Sickness and Disability Program (VSDP) is a single-employer plan. It is also known as the Disability Insurance Trust Fund. The Commonwealth provides OPEB disability insurance benefits, in accordance with state statutes, to eligible retired and terminated employees. Eligible employees include 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 and full-time and part-time, salaried state employees covered under VRS, SPORS, and VaLORS. State agencies are required by Title 51.1 of the Code of Virginia to contribute to the cost of providing long-term disability benefits and administering the program. The following is the approximate number of employees covered by this plan on the measurement date of June 30, 2018:

<table>
<thead>
<tr>
<th>VSDP</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Inactive employees currently receiving benefit payments</td>
<td>4,808</td>
</tr>
<tr>
<td>Inactive employees entitled to but not yet receiving benefit payments</td>
<td>—</td>
</tr>
<tr>
<td>Active employees</td>
<td>73,620</td>
</tr>
<tr>
<td>Total</td>
<td>76,428</td>
</tr>
</tbody>
</table>
Group Life Insurance Program

The Group Life Insurance Program (GLI) is a cost-sharing, multiple employer plan. Members whose employers participate in the Group Life Insurance Program are covered automatically under the Basic Group Life Insurance Program upon employment. This program was established July 1, 1960, for state employees, teachers and employees of political subdivisions that elect the program, including certain employers that do not participate in VRS for retirement. At retirement or termination, accidental death benefits cease and natural death coverage reduces at a rate equal to 25.0 percent on January 1 of the first full calendar year following retirement or termination and on January 1 of each year thereafter, until it reaches 25.0 percent of its original value. These group life insurance benefit provisions and requirements are established by Title 51.1 of the Code of Virginia. Participating employers and covered employees are required to contribute to the cost of group life insurance benefits. Employers may assume employees’ contributions. A portion of the premium contributions collected during members’ active careers is placed in an advance premium deposit reserve. This reserve is to fund the claims for eligible retired and deferred members.

Line of Duty Act Program

The Line of Duty Act Program (LODA) is a cost-sharing, multiple employer plan. It provides death and health insurance reimbursement 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. Benefit provisions and eligibility requirements are established by Title 9.1 of the Code of Virginia. The System is responsible for managing the assets of the program. Participating employers made contributions to the program beginning in fiscal year 2012. The employer contribution rate was determined by the System's actuary using the anticipated costs and the number of covered individuals associated with all participating employers. Additionally, beginning in fiscal year 2018, the Department of Human Resource Management administered the benefits and payment of claims under this program. The System manages the death benefit payments.

3) Funding

The contribution requirements are governed by the Code of Virginia, but may be impacted as a result of funding provided to state agencies by the Virginia General Assembly. Employer contributions by the Commonwealth for the RHIC and VSDP were 1.2 percent and 0.6 percent, respectively, of covered employee compensation. In addition, the contributions by the Commonwealth for the RHIC: Non-State for general registrars, constitutional officers, and their employees, and local social service employees were approximately 0.4 percent.

The total contribution rate for the GLI was 1.3 percent allocated into an employee and an employer component using a 60/40 split. The employee component was 0.8 percent and the employer component was 0.5 percent. Each employer’s contractually required employer contribution rate for the year ended June 30, 2019, was 0.5 percent of covered employee compensation. Each employer’s contractually required employer contribution rate for the LODA for the year ended June 30, 2019, was $705.8 per covered full-time-equivalent employee.

All rates were based on an actuarially determined rate from an actuarial valuation as of June 30, 2017. For RHIC and GLI, the actuarially determined rate was expected to finance the costs of benefits payable during the year, with an additional amount to finance any unfunded accrued liability. For VSDP, 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. For the LODA, the rate represents a pay-as-you-go funding rate and not the full actuarial cost of 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.

Employer contributions by the Commonwealth to the RHIC, VSDP, GLI, LODA, and the RHIC Non-State plans were $80.1 million, $25.3 million, $30.9 million, $8.0 million, and $3.8 million, respectively, for the year ended June 30, 2019.
4) Changes in Net OPEB Liability and Proportionate Share of Net OPEB Liability

The total OPEB liability for each plan was determined based on the actuarial valuation as of June 30, 2017, using updated actuarial assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2018. The following tables (dollars in thousands) show the Commonwealth’s total OPEB liability, plan fiduciary net position, and net OPEB liability (asset) for the RHIC and VSDP for the current and prior year, and the Commonwealth’s proportionate share of the net OPEB liability for GLI, LODA, and RHIC Non-State plans. Since the VSDP has a net OPEB asset rather than a net OPEB liability, the net OPEB asset amount is not included in the total balance amount. The Commonwealth’s Proportion for the GLI, LODA, and RHIC Non-State plans represents the percentage of the Commonwealth’s share of Net OPEB Liability amount compared to the Net OPEB Liability amount for all employers of $1.5 billion, $313.5 million and $39.8 million, respectively.
## Primary Government

### RHIC VSDP

<table>
<thead>
<tr>
<th></th>
<th>Increase (Decrease)</th>
<th></th>
<th>Increase (Decrease)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total OPEB Liability (a)</td>
<td>Plan Fiduciary Net Position (b)</td>
<td>Net OPEB Liability (a)-(b)</td>
<td>Total OPEB Liability (a)</td>
</tr>
<tr>
<td>Balances at June 30, 2018</td>
<td>$416,438</td>
<td>$33,446</td>
<td>$382,992</td>
<td>$146,657</td>
</tr>
<tr>
<td>Changes for the year</td>
<td>Service cost</td>
<td>8,204</td>
<td>—</td>
<td>8,204</td>
</tr>
<tr>
<td></td>
<td>Interest</td>
<td>27,930</td>
<td>—</td>
<td>27,930</td>
</tr>
<tr>
<td></td>
<td>Benefit changes</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Differences between actual and expected experience</td>
<td>311</td>
<td>—</td>
<td>311</td>
</tr>
<tr>
<td></td>
<td>Assumption changes</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Contributions - employer</td>
<td>—</td>
<td>33,163</td>
<td>(33,163)</td>
</tr>
<tr>
<td></td>
<td>Contributions - member</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Net investment income</td>
<td>—</td>
<td>2,383</td>
<td>(2,383)</td>
</tr>
<tr>
<td></td>
<td>Benefit payments</td>
<td>(31,874)</td>
<td>(29,104)</td>
<td>(2,770)</td>
</tr>
<tr>
<td></td>
<td>Third-party administrator charges</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Administrative expense</td>
<td>—</td>
<td>(62)</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>Other changes</td>
<td>224</td>
<td>(224)</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Net changes</td>
<td>4,571</td>
<td>6,654</td>
<td>(2,033)</td>
</tr>
<tr>
<td>Balances at June 30, 2019</td>
<td>$421,009</td>
<td>$40,050</td>
<td>$380,959</td>
<td>$147,408</td>
</tr>
</tbody>
</table>

### Other Plans

<table>
<thead>
<tr>
<th></th>
<th>Commonwealth’s Proportion</th>
<th>Proportionate Share of Net OPEB Liability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Life Insurance</td>
<td>14.8%</td>
<td>$229,142</td>
</tr>
<tr>
<td>Line of Duty Act</td>
<td>56.9%</td>
<td>178,469</td>
</tr>
<tr>
<td>Retiree Health Insurance Credit: Non-State</td>
<td>100.0%</td>
<td>39,753</td>
</tr>
<tr>
<td>Balance at June 30, 2019</td>
<td>$443,364</td>
<td></td>
</tr>
</tbody>
</table>

Total balance at June 30, 2019: (excludes VSDP net OPEB asset) (1) (2) $824,323

### Component Units

<table>
<thead>
<tr>
<th></th>
<th>Increase (Decrease)</th>
<th></th>
<th>Increase (Decrease)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total OPEB Liability (a)</td>
<td>Plan Fiduciary Net Position (b)</td>
<td>Net OPEB Liability (a)-(b)</td>
<td>Total OPEB Liability (a)</td>
</tr>
<tr>
<td>Balances at June 30, 2018</td>
<td>$573,590</td>
<td>$46,070</td>
<td>$527,520</td>
<td>$90,356</td>
</tr>
<tr>
<td>Changes for the year</td>
<td>Service cost</td>
<td>11,441</td>
<td>—</td>
<td>11,441</td>
</tr>
<tr>
<td></td>
<td>Interest</td>
<td>38,953</td>
<td>—</td>
<td>38,953</td>
</tr>
<tr>
<td></td>
<td>Benefit changes</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Differences between actual and expected experience</td>
<td>434</td>
<td>—</td>
<td>434</td>
</tr>
<tr>
<td></td>
<td>Assumption changes</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Contributions - employer</td>
<td>—</td>
<td>46,253</td>
<td>(46,253)</td>
</tr>
<tr>
<td></td>
<td>Contributions - member</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Net investment income</td>
<td>—</td>
<td>3,323</td>
<td>(3,323)</td>
</tr>
<tr>
<td></td>
<td>Benefit payments</td>
<td>(37,243)</td>
<td>(40,913)</td>
<td>2,770</td>
</tr>
<tr>
<td></td>
<td>Third-party administrator charges</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Administrative expense</td>
<td>—</td>
<td>(87)</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>Other changes</td>
<td>312</td>
<td>(312)</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Net changes</td>
<td>13,585</td>
<td>9,788</td>
<td>3,797</td>
</tr>
<tr>
<td>Balances at June 30, 2019</td>
<td>$587,175</td>
<td>$55,858</td>
<td>$531,317</td>
<td>$90,325</td>
</tr>
</tbody>
</table>

### Other Plans

<table>
<thead>
<tr>
<th></th>
<th>Commonwealth’s Proportion</th>
<th>Proportionate Share of Net OPEB Liability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Life Insurance</td>
<td>15.7%</td>
<td>$238,645</td>
</tr>
<tr>
<td>Line of Duty Act</td>
<td>3.0%</td>
<td>9,400</td>
</tr>
<tr>
<td>Balance at June 30, 2019</td>
<td>$248,045</td>
<td></td>
</tr>
</tbody>
</table>

Total balance at June 30, 2019: (excludes VSDP net OPEB asset) (1) (3) $779,382

(1) The VSDP net OPEB asset is included in Other Restricted Assets in the accompanying government-wide financial statements.
(2) The primary government’s aggregate OPEB liability is $1,409,822 (dollars in thousands) as of June 30, 2019. This includes amounts for both the VRS-administered and DHRM-administered plans.
(3) The component unit’s aggregate OPEB liability is $1,278,414 (dollars in thousands) as of June 30, 2019. This includes amounts for both the VRS-administered and DHRM-administered plans as well as other OPEB plans.
The amounts in the previous tables include governmental, business-type, and component unit activity for the Commonwealth’s VRS OPEB plans. The table excludes other net OPEB liability amounts of $19.7 million for all other component units and includes the fiduciary net OPEB liability of $12,134.

The net OPEB liabilities were based on an actuarial valuation as of June 30, 2017, using the entry age normal actuarial cost method. The actuarial assumptions included the following: (a) investment rate of return, net of OPEB plan investment expenses, including inflation: 7.0 percent for RHIC, VSDP, and GLI, and 3.9 percent for LODA; and (b) projected salary increases, including a 2.5 percent inflation component, ranging from 3.5 percent to 6.0 percent for VRS state, JRS, SPORS, and VaLORS employees, and teachers and political subdivision employees. For these OPEB plans, the teachers and political subdivision employees are not Commonwealth employees and, therefore, are excluded from the accompanying tables.

For more detailed actuarial information, refer to the Virginia Retirement System’s financial statements, including the “Actuarial Assumptions and Methods – Other Post-Employment Benefit Plan Funds” schedule.

5) Changes to and Sensitivity of Discount Rate

The discount rate used to measure the total OPEB liability was 7.0 percent for the prefunded plans. These include the Group Life Insurance Program, the Retiree Health Insurance Credit Program, and the Disability Insurance Program.

The projection of cash flows used to determine the discount rate assumed that contributions from participating employers will be based on the actuarially determined rates based on the Board’s funding policy, which certifies the required rates under Title 51.1 of the Code of Virginia. Based on those assumptions, the fiduciary net position was projected to be available to make all of the projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of the projected benefit payments to determine the total OPEB liability. In accordance with GASB Statement No. 75 regarding the disclosure of the sensitivity of the net OPEB liability to changes in the discount rate, the following table (dollars in thousands) presents the employers’ net OPEB liability for each of the plans calculated using the discount rate of 7.0 percent, as well as what the employers’ net OPEB liability would be if it were calculated using a discount rate that is 1.0 percent lower (6.0 percent) or 1.0 percent higher (8.0 percent) than the current rate.

The Line of Duty Act Program is funded on a pay-as-you-go basis. As a result, the liabilities are valued using a discount rate of 3.9 percent, which approximates the risk-free rate of return. The following table (dollars in thousands) shows the Commonwealth’s changes in the discount rate and the healthcare trend rate.
Primary Government

Changes in Discount Rate

<table>
<thead>
<tr>
<th></th>
<th>RHIC</th>
<th>shed</th>
<th>VSDP</th>
<th>shed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Net OPEB Liability</td>
<td></td>
<td>Net OPEB Liability (Asset) (1)</td>
<td></td>
</tr>
<tr>
<td>1.0% Decrease</td>
<td>Current Discount Rate (6.0%)</td>
<td>1.0%</td>
<td>Current Discount Rate (6.0%)</td>
<td>1.0%</td>
</tr>
<tr>
<td></td>
<td>(7.0%)</td>
<td>Increase (8.0%)</td>
<td>(7.0%)</td>
<td>Increase (8.0%)</td>
</tr>
<tr>
<td>$ 421,295</td>
<td>$ 380,959</td>
<td>$ 364,252</td>
<td>$ (134,622)</td>
<td>$ (139,655)</td>
</tr>
</tbody>
</table>

GLI

<table>
<thead>
<tr>
<th>Proportionate Share of Net OPEB Liability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0% Decrease (6.0%)</td>
</tr>
<tr>
<td>$ 294,254</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LODA</th>
<th>Proportionate Share of Net OPEB Liability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0% Decrease (2.9%)</td>
<td>Current Discount Rate (3.9%)</td>
</tr>
<tr>
<td>$ 204,489</td>
<td>$ 178,469</td>
</tr>
</tbody>
</table>

Changes in Healthcare Cost Trend Rates

<table>
<thead>
<tr>
<th></th>
<th>RHIC</th>
<th>shed</th>
<th>VSDP</th>
<th>shed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Proportionate Share of Net OPEB Liability</td>
<td></td>
<td>Proportionate Share of Net OPEB Liability</td>
<td></td>
</tr>
<tr>
<td>1.0% Decrease (6.8%) Decreasing to 4.0%</td>
<td>Current Healthcare Cost Trend Rates (7.8%) Decreasing to 5.0%</td>
<td>1.0% Decrease (8.8%) Decreasing to 6.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$ 44,352</td>
<td>$ 39,753</td>
<td>$ 35,828</td>
<td>$ 152,062</td>
<td>$ 178,469</td>
</tr>
</tbody>
</table>

Component Units

Changes in Discount Rate

<table>
<thead>
<tr>
<th></th>
<th>RHIC</th>
<th>shed</th>
<th>VSDP</th>
<th>shed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Net OPEB Liability</td>
<td></td>
<td>Net OPEB Liability (Asset) (1)</td>
<td></td>
</tr>
<tr>
<td>1.0% Decrease (6.0%)</td>
<td>Current Discount Rate (7.0%)</td>
<td>1.0%</td>
<td>Current Discount Rate (7.0%)</td>
<td>1.0%</td>
</tr>
<tr>
<td></td>
<td>(8.0%)</td>
<td>Increase (8.0%)</td>
<td>(8.0%)</td>
<td>Increase (8.0%)</td>
</tr>
<tr>
<td>$ 587,574</td>
<td>$ 531,317</td>
<td>$ 482,911</td>
<td>$ (82,490)</td>
<td>$ (85,573)</td>
</tr>
</tbody>
</table>

GLI

<table>
<thead>
<tr>
<th>Proportionate Share of Net OPEB Liability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0% Decrease (6.0%)</td>
</tr>
<tr>
<td>$ 311,902</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LODA</th>
<th>Proportionate Share of Net OPEB Liability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0% Decrease (2.9%)</td>
<td>Current Discount Rate (3.9%)</td>
</tr>
<tr>
<td>$ 10,771</td>
<td>$ 9,400</td>
</tr>
</tbody>
</table>

Changes in Healthcare Cost Trend Rates

<table>
<thead>
<tr>
<th></th>
<th>LODA</th>
<th>shed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Proportionate Share of Net OPEB Liability</td>
<td></td>
</tr>
<tr>
<td>1.0% Decrease (6.8%) Decreasing to 4.0%</td>
<td>Healthcare Cost Trend Rates (7.8%) Decreasing to 5.0%</td>
<td>1.0% Increase (8.8%) Decreasing to 6.0%</td>
</tr>
<tr>
<td>$ 8,009</td>
<td>$ 9,400</td>
<td>$ 11,133</td>
</tr>
</tbody>
</table>

(1) The VSDP net OPEB asset is included in Other Restricted Assets in the accompanying government-wide financial statements.
The long-term expected rate of return on the System’s investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of 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 allocations are based on the Strategic Asset Allocation Implementation Schedule and Allowable Ranges document, which was approved by the VRS Board of Trustees on June 7, 2016. Best estimates of arithmetic real rates of return for each major asset class included in the System’s target asset allocation are summarized in the following table.

<table>
<thead>
<tr>
<th>Asset Class (Strategy)</th>
<th>Target Allocation</th>
<th>Arithmetic Long-Term Expected Rate of Return</th>
<th>Weighted Average Long-Term Expected Rate of Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Equity</td>
<td>40.0%</td>
<td>4.5%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Fixed Income</td>
<td>15.0%</td>
<td>0.7%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Credit Strategies</td>
<td>15.0%</td>
<td>4.0%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Real Assets</td>
<td>15.0%</td>
<td>5.8%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Private Equity</td>
<td>15.0%</td>
<td>9.5%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td></td>
<td>4.8%</td>
</tr>
<tr>
<td>Inflation</td>
<td></td>
<td></td>
<td>2.5%</td>
</tr>
</tbody>
</table>

The allocation in the previous table provides a one-year expected return of 7.3 percent. 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 pension 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 6.8 percent, including expected inflation of 2.5 percent.

The long-term expected rate of return on the LODA OPEB Program’s investments was set at 3.9 percent for this valuation. Since LODA is funded on a current-disbursement basis, it is not able to use the VRS Pooled Investments 7.0 percent assumption. Instead, the assumed annual rate of return of 3.9 percent 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 as of June 30, 2018.
## Primary Government (3)

<table>
<thead>
<tr>
<th></th>
<th>Deferred Outflows of Resources</th>
<th>Deferred Inflows of Resources</th>
<th>Totals (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differences between expected and actual experience</td>
<td>$37,526</td>
<td>$128,025</td>
<td>$176,182</td>
</tr>
<tr>
<td>Changes of assumptions</td>
<td>—</td>
<td>278,341</td>
<td></td>
</tr>
<tr>
<td>Net difference between projected and actual earnings on plan investments</td>
<td>—</td>
<td>16,694</td>
<td></td>
</tr>
<tr>
<td>Changes in proportion and difference between employer contributions and proportionate share of contributions</td>
<td>39,324</td>
<td>59,650</td>
<td></td>
</tr>
<tr>
<td>Employer contributions subsequent to the Measurement Date</td>
<td>75,259</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Amounts associated with transactions subsequent to the Measurement Date</td>
<td>24,073</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$176,182</td>
<td>$480,710</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>RHIC</th>
<th>VSDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differences between expected and actual experience</td>
<td>$263</td>
<td>$ —</td>
</tr>
<tr>
<td>Changes of assumptions</td>
<td>—</td>
<td>3,467</td>
</tr>
<tr>
<td>Net difference between projected and actual earnings on plan investments</td>
<td>—</td>
<td>621</td>
</tr>
<tr>
<td>Changes in proportion and difference between employer contributions and proportionate share of contributions</td>
<td>6,610</td>
<td>14,174</td>
</tr>
<tr>
<td>Employer contributions subsequent to the Measurement Date</td>
<td>33,385</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>$40,258</td>
<td>$18,262</td>
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<table>
<thead>
<tr>
<th></th>
<th>GLI</th>
<th>LODA</th>
</tr>
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<tbody>
<tr>
<td>Differences between expected and actual experience</td>
<td>$11,001</td>
<td>$4,034</td>
</tr>
<tr>
<td>Changes of assumptions</td>
<td>—</td>
<td>9,385</td>
</tr>
<tr>
<td>Net difference between projected and actual earnings on plan investments</td>
<td>—</td>
<td>7,324</td>
</tr>
<tr>
<td>Changes in proportion and difference between employer contributions and proportionate share of contributions</td>
<td>5,376</td>
<td>8,288</td>
</tr>
<tr>
<td>Employer contributions subsequent to the Measurement Date</td>
<td>14,794</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>$31,171</td>
<td>$29,031</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>RHIC: Non-State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differences between expected and actual experience</td>
<td>$641</td>
</tr>
<tr>
<td>Changes of assumptions</td>
<td>—</td>
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<tr>
<td>Net difference between projected and actual earnings on plan investments</td>
<td>—</td>
</tr>
<tr>
<td>Changes in proportion and difference between employer contributions and proportionate share of contributions</td>
<td>951</td>
</tr>
<tr>
<td>Employer contributions subsequent to the Measurement Date</td>
<td>3,841</td>
</tr>
<tr>
<td>Total</td>
<td>$5,433</td>
</tr>
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</table>
## Component Units (2) (3)

<table>
<thead>
<tr>
<th></th>
<th>Totals (1)</th>
<th>RHIC</th>
<th>VSDP</th>
<th>RHIC</th>
<th>VSDP</th>
<th>GLI</th>
<th>LODA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Deferred</td>
<td>Deferred</td>
<td>Deferred</td>
<td>Deferred</td>
<td>Deferred</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Outflows of</td>
<td>Inflows of</td>
<td>Outflows of</td>
<td>Inflows of</td>
<td>Outflows of</td>
<td>Inflows of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Resources</td>
<td>Resources</td>
<td>Resources</td>
<td>Resources</td>
<td>Resources</td>
<td>Resources</td>
<td></td>
</tr>
<tr>
<td>Differences between expected and actual experience</td>
<td>$13,373</td>
<td>$92,634</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changes of assumptions</td>
<td>—</td>
<td>188,932</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net difference between projected and actual earnings on plan investments</td>
<td>—</td>
<td>13,698</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changes in proportion and difference between employer contributions and proportionate share of contributions</td>
<td>41,383</td>
<td>22,860</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employer contributions subsequent to the Measurement Date</td>
<td>72,859</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amounts associated with transactions subsequent to the Measurement Date</td>
<td>17,273</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$144,888</strong></td>
<td><strong>$318,124</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) These tables aggregate the deferred inflows of resources and deferred outflows of resources for both the VRS-administered and DHRM-administered plans.

(2) The component unit amounts in the accompanying financial statements include deferred outflows of resources and deferred inflows of resources of $8,333 (dollars in thousands) and $2,725 (dollars in thousands), respectively, for other OPEB plans.

(3) Additionally, during fiscal year 2019, the Commonwealth recognized OPEB expense for the primary government and component units of $43,800 (dollars in thousands) and $54,351 (dollars in thousands), respectively, for the VRS-administered OPEB plans. The recognized OPEB expense by plan for the primary government was as follows (dollars in thousands): RHIC $30,805; VSDP $7,426; GLI $886; LODA $1,171; and RHIC: Non-State $3,513. The recognized OPEB expense by plan for component units was as follows (dollars in thousands): RHIC $47,037; VSDP $4,564; GLI $1,952; and LODA $798.
Deferred Amounts to be Recognized in Fiscal Years Following Reporting Date

The following tables (dollars in thousands) provide the net estimated amount of the deferred inflows and deferred outflows of resources that will be recognized in the Commonwealth’s OPEB expense for each of the next five fiscal years and thereafter. These amounts exclude employer contributions made subsequent to the measurement date as those contributions will reduce the fiscal year 2020 net OPEB liability (asset).

Primary Government

<table>
<thead>
<tr>
<th>Year</th>
<th>RHIC</th>
<th>VSDP</th>
<th>GLI</th>
<th>LODA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>$(2,935)</td>
<td>$(5,077)</td>
<td>$(4,322)</td>
<td>$375</td>
</tr>
<tr>
<td>2021</td>
<td>$(2,935)</td>
<td>$(5,077)</td>
<td>$(4,322)</td>
<td>$375</td>
</tr>
<tr>
<td>2022</td>
<td>$(2,934)</td>
<td>$(5,078)</td>
<td>$(4,322)</td>
<td>$374</td>
</tr>
<tr>
<td>2023</td>
<td>$(2,242)</td>
<td>$(2,557)</td>
<td>$(1,594)</td>
<td>$425</td>
</tr>
<tr>
<td>2024</td>
<td>$(366)</td>
<td>$(2,367)</td>
<td>$(896)</td>
<td>$480</td>
</tr>
<tr>
<td>Thereafter</td>
<td>23</td>
<td>$(2,470)</td>
<td>$1,010</td>
<td>$1,720</td>
</tr>
</tbody>
</table>

RHIC: Non-State

<table>
<thead>
<tr>
<th>Year</th>
<th>RHIC</th>
<th>VSDP</th>
<th>GLI</th>
<th>LODA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>$(19)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>(19)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>(19)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2024</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thereafter</td>
<td>73</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Component Units

<table>
<thead>
<tr>
<th>Year</th>
<th>RHIC</th>
<th>VSDP</th>
<th>GLI</th>
<th>LODA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>$576</td>
<td>$(3,034)</td>
<td>$(2,945)</td>
<td>$51</td>
</tr>
<tr>
<td>2021</td>
<td>576</td>
<td>$(3,034)</td>
<td>$(2,945)</td>
<td>51</td>
</tr>
<tr>
<td>2022</td>
<td>576</td>
<td>$(3,035)</td>
<td>$(2,945)</td>
<td>51</td>
</tr>
<tr>
<td>2023</td>
<td>440</td>
<td>$(1,528)</td>
<td>$(1,087)</td>
<td>$58</td>
</tr>
<tr>
<td>2024</td>
<td>72</td>
<td>$(1,415)</td>
<td>$610</td>
<td>65</td>
</tr>
<tr>
<td>Thereafter</td>
<td>(4)</td>
<td>$(1,474)</td>
<td>$689</td>
<td>235</td>
</tr>
</tbody>
</table>

B. Department of Human Resource Management (DHRM-administered) OPEB Plan

1) Administration

The DHRM-administered defined benefit OPEB plan mentioned below does not have a trust that meets the requirements of GASB Statement No. 75. In addition, the total OPEB liability for this plan has a measurement date of June 30, 2018. A separately issued financial report for this DHRM-administered OPEB plan is not available.

2) Plan Description

The Commonwealth provides a Pre-Medicare Retiree Healthcare (PMRH) plan established by Title 2.2 of the Code of Virginia for retirees who are not yet eligible to participate in Medicare. It is the same health insurance program offered to active employees and managed by DHRM. After retirement, the Commonwealth of Virginia no longer subsidizes the retiree’s premium; however, since both active employees and retirees are included in the same pool for purposes of determining health insurance rates, retiree rates are effectively lower than what might otherwise be available outside of this benefit. Following are eligibility requirements for Virginia Retirement System (VRS) retirees:

- Retiring state employee who is eligible for a monthly retirement benefit from VRS;
- Start receiving (do not defer) retirement benefit immediately upon retirement;
- Last employer before retirement was the Commonwealth of Virginia;
- Eligible for (even if not enrolled) coverage as an active employee in the State Health Benefits Program until retirement date (not including Extended Coverage/COBRA); and
- Enroll no later than 31 days from retirement date.

Effective January 1, 2017, are the following eligibility requirements for Optional Retirement Plan retirees:

- Terminating state employee who participates in one of the qualified Optional Retirement Plans;
- Last employer before termination was the Commonwealth of Virginia;
- Eligible for (even if not enrolled) coverage in the State Employee Health Benefits Program for active employees at the time of termination;
- Meet age and service requirements for an immediate retirement benefit under the non-ORP VRS plan that the retiree would have been eligible for on the date of hire had the retiree not elected the ORP; and
- Enroll in the State Retiree Health Benefits Program no later than 31 days from the date the retiree loses coverage (or loses eligibility for coverage) in the State Health Benefits Program for active employees due to termination of employment.

Eligibility for Optional Retirement Plan retirees who terminated prior to January 1, 2017, would be based on the policy in place at the time of their termination.

This fund is reported as part of the Commonwealth’s Health Care Internal Service Fund. Benefit payments are recognized when due and payable in accordance with the benefit...
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 5,200 retirees and 91,800 active employees in the program in fiscal year 2018. 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.

3) Funding

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.

4) Changes in Total OPEB Liability

The PMRH total OPEB liability of $1.0 billion as of June 30, 2019, was measured as of June 30, 2018, and was determined by an actuarial valuation as of June 30, 2018. The following tables (dollars in thousands) show the Commonwealth’s total OPEB liability for the current and prior year:

### Primary Government

<table>
<thead>
<tr>
<th>PMRH</th>
<th>Increase (Decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Total OPEB Liability</td>
<td></td>
</tr>
<tr>
<td>Balances at June 30, 2018</td>
<td>$ 760,551</td>
</tr>
<tr>
<td>Changes for the year</td>
<td></td>
</tr>
<tr>
<td>Service cost</td>
<td>55,115</td>
</tr>
<tr>
<td>Interest cost</td>
<td>28,691</td>
</tr>
<tr>
<td>Changes of benefit terms</td>
<td>—</td>
</tr>
<tr>
<td>Differences between expected and actual experience</td>
<td>(111,203)</td>
</tr>
<tr>
<td>Changes of assumptions</td>
<td>(123,291)</td>
</tr>
<tr>
<td>Benefit payments</td>
<td>(24,364)</td>
</tr>
<tr>
<td>Net change</td>
<td>(175,052)</td>
</tr>
<tr>
<td>Balances at June 30, 2019</td>
<td>$ 585,499</td>
</tr>
</tbody>
</table>

The amounts in the previous tables include governmental, business-type, and component unit activity for the DHRM-administered OPEB plan. The table excludes the non-DHRM OPEB plans’ total OPEB liability of $59.2 million for all other component units and includes the fiduciary OPEB liability of $8,855.

The PMRH total OPEB liability was based on an actuarial valuation with a valuation date of June 30, 2018. 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 8.2 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.
Measurement Date: June 30, 2018 (one year prior to the end of the fiscal year)

Actuarial Cost Method: Entry Age Normal

Amortization Method: Level dollar, Closed

Effective Amortization Period: 6.19 years

Discount Rate: 3.9%

Projected Salary Increases: 4.0%

Medical Trend Under 65: Medical & Rx: 8.2% to 5.0% Dental: 4.0%

Before reflecting excise tax

Year of Ultimate Trend: 2025

Mortality: Mortality rates vary by participant status

Pre-Retirement: RP-2014 Employee Rates projected with Scale BB to 2020; males setback 1 year, 85.0% 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 and females setback 1 year

Post-Disablement: RP-2014 Disabled Mortality Rates projected with Scale BB to 2020; males 115.0% of rates; females 130.0% 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, 2018. The inflation rate used was 2.3 percent per year and there were no ad hoc postemployment benefit changes used to measure the total OPEB liability.

Changes of Assumptions

The following actuarial assumptions were updated since the June 30, 2017 valuation based on recent experience:

- Spousal coverage - reduced the rate from 50.0 percent to 35.0 percent
- Retiree participation - reduced the rate from 70.0 percent to 60.0 percent

Spousal coverage and retiree participation were both reduced based on a blend of recent experience and the prior year assumptions. The mortality assumption was modified slightly to reflect mortality improvement projection scale BB to 2020. Additionally, the discount rate was increased from 3.6 percent to 3.9 percent based on the Bond Buyers GO 20 Municipal Bond Index.
5) Changes to and Sensitivity of Discount Rate

The following table (dollars in thousands) shows the Commonwealth’s changes in discount rate and the healthcare cost trend rates.

**Primary Government**

<table>
<thead>
<tr>
<th>Changes in Discount Rate</th>
<th>PMRH</th>
<th>Total OPEB Liability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0% Decrease</td>
<td>1.0%</td>
<td></td>
</tr>
<tr>
<td>(2.9%)</td>
<td>(3.9%)</td>
<td></td>
</tr>
<tr>
<td>Current Discount Rate</td>
<td>1.0%</td>
<td></td>
</tr>
<tr>
<td>(3.9%)</td>
<td>(4.9%)</td>
<td></td>
</tr>
<tr>
<td>$ 626,467</td>
<td>$ 585,499</td>
<td>$ 546,541</td>
</tr>
</tbody>
</table>

**Changes in Healthcare Cost Trend Rates**

<table>
<thead>
<tr>
<th>PMRH</th>
<th>Total OPEB Liability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0% Decrease</td>
<td></td>
</tr>
<tr>
<td>(7.2% decreasing to 4.0%)</td>
<td></td>
</tr>
<tr>
<td>Healthcare Cost Trend Rates</td>
<td>(8.2% decreasing to 5.0%)</td>
</tr>
<tr>
<td>1.0% Increase</td>
<td>(9.2% decreasing to 6.0%)</td>
</tr>
<tr>
<td>$ 522,228</td>
<td>$ 585,499</td>
</tr>
</tbody>
</table>

**Component Units**

<table>
<thead>
<tr>
<th>Changes in Discount Rate</th>
<th>PMRH</th>
<th>Total OPEB Liability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0% Decrease</td>
<td>1.0%</td>
<td></td>
</tr>
<tr>
<td>(2.9%)</td>
<td>(3.9%)</td>
<td></td>
</tr>
<tr>
<td>Current Discount Rate</td>
<td>1.0%</td>
<td></td>
</tr>
<tr>
<td>(3.9%)</td>
<td>(4.9%)</td>
<td></td>
</tr>
<tr>
<td>$ 449,540</td>
<td>$ 420,141</td>
<td>$ 392,187</td>
</tr>
</tbody>
</table>

**Changes in Healthcare Cost Trend Rates**

<table>
<thead>
<tr>
<th>PMRH</th>
<th>Total OPEB Liability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0% Decrease</td>
<td></td>
</tr>
<tr>
<td>(7.2% decreasing to 4.0%)</td>
<td></td>
</tr>
<tr>
<td>Healthcare Cost Trend Rates</td>
<td>(8.2% decreasing to 5.0%)</td>
</tr>
<tr>
<td>1.0% Increase</td>
<td>(9.2% decreasing to 6.0%)</td>
</tr>
<tr>
<td>$ 374,739</td>
<td>$ 420,141</td>
</tr>
</tbody>
</table>

6) OPEB Related Deferred Outflows and Deferred Inflows

The following tables (dollars in thousands) summarize the OPEB related items reported as deferred outflows or deferred inflows of resources:

**Primary Government (2)**

<table>
<thead>
<tr>
<th>Differences between expected and actual experience</th>
<th>Deferral Outflows of Resources</th>
<th>Deferral Inflows of Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ —</td>
<td>$ 118,056</td>
</tr>
<tr>
<td>Changes of assumptions</td>
<td>—</td>
<td>234,177</td>
</tr>
<tr>
<td>Changes in proportion</td>
<td>16,947</td>
<td>25,716</td>
</tr>
<tr>
<td>Amounts associated with transactions</td>
<td>24,073</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>$ 41,020</td>
<td>$ 377,949</td>
</tr>
</tbody>
</table>

**Component Units (1) (2)**

<table>
<thead>
<tr>
<th>Differences between expected and actual experience</th>
<th>Deferral Outflows of Resources</th>
<th>Deferral Inflows of Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ —</td>
<td>$ 84,710</td>
</tr>
<tr>
<td>Changes of assumptions</td>
<td>—</td>
<td>168,031</td>
</tr>
<tr>
<td>Changes in proportion</td>
<td>18,311</td>
<td>9,542</td>
</tr>
<tr>
<td>Amounts associated with transactions</td>
<td>17,273</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>$ 35,584</td>
<td>$ 262,283</td>
</tr>
</tbody>
</table>

(1) The component unit amounts exclude deferred outflows of resources and deferred inflows of resources of $48,181 and $52,930 (dollars in thousands), respectively, for other OPEB plans.

(2) Additionally, during fiscal year 2019, the Commonwealth recognized OPEB expense for the primary government and component units of $8,966 (dollars in thousands) and $9,577 (dollars in thousands), respectively, for the DHRM-administered OPEB plan.

**Deferred Amounts to be Recognized in Fiscal Years Following Reporting Date**

The following tables (dollars in thousands) provide the net estimated amount of the deferred inflows and deferred outflows of resources that will be recognized in the Commonwealth’s OPEB expense for each of the next five fiscal years and thereafter. These amounts exclude amounts associated with transactions subsequent to the measurement date as those will reduce the fiscal year 2020 total OPEB liability.
7) Other OPEB Plans

Higher Education

The University of Virginia (nonmajor component unit) has a Retiree Health Plan that covers employees who retire before becoming eligible for Medicare. In addition, an Optional Retirement Life Insurance Plan is offered to University faculty and Medical Center employees who participate in the Optional Retirement Plans. For these OPEB plans, the University reported a total OPEB liability of $58.3 million, deferred outflows of resources of $13,192, and deferred inflows of resources of $52.5 million as of June 30, 2019. Additional information on these plans can be found at the University’s website at www.virginia.edu.

Other Component Units

The Virginia Housing Development Authority (major component unit) offers a medical, dental, and vision benefit plan, and reports deferred outflows of resources of $4.7 million and deferred inflows of resources of $186,913 as of June 30, 2019.

The Virginia Resources Authority (major component unit) offers an optional Retirement Life Insurance Plan for those employees who choose to participate. The Authority reports a net OPEB liability of $205,649, deferred outflows of resources of $13,322, and deferred inflows of resources of $17,000 as of June 30, 2019.

The Virginia Port Authority (nonmajor component unit) offers medical and dental benefits for retirees. The Authority reports a total OPEB liability of $910,998, deferred outflows of $34,989 and deferred inflows of resources of $428,347 as of June 30, 2019.

Hampton Roads Sanitation District (nonmajor component unit) offers a health and dental benefit plan for those employees who choose to participate. The District reports a net OPEB liability of $18.7 million, deferred inflows of resources of $2.5 million and deferred outflows of resources of $3.6 million as of June 30, 2019.

The Virginia Biotechnology Research Partnership Authority (nonmajor component unit) offers an Optional Retirement Life Insurance Plan for those employees who choose to participate. The Authority reports a net OPEB liability of $52,055, deferred outflows of resources of $8,490, and deferred inflows of resources of $4,162 as of June 30, 2019.

20. DEFERRED COMPENSATION PLANS

The Commonwealth offers its employees a deferred compensation plan created in accordance with Internal Revenue Code Section 457(b). The Virginia Retirement System (the System) administers the deferred compensation plan, pursuant to the Government Employees Deferred Compensation Plan Act, Section 51.1 of the Code of Virginia. The System contracts with private corporations or institutions subject to the standards set forth in the Code to provide investment products as well as any other goods and services related to the administration of the deferred compensation plan. The Department of Accounts is responsible for the accounting, reconciliation, payment to the plan through payroll deductions, and timely transfer of withheld funds to the trustee designated by the System for investment. The plan provides a number of investment options and is designed so that each participant retains investment control of his/her individual account. The plan, available to all state employees, permits them to defer a portion of their salary until future years. The deferred compensation is held in trust for the exclusive benefit of plan participants and their beneficiaries and is not available to employees until termination, retirement, death, unforeseeable emergency, or an in-service distribution at age 70½ or later. Since the System has no fiduciary relationship with plan participants, plan assets as of June 30, 2019, of $2.9 billion are not included in the accompanying financial statements.

In addition, the Commonwealth provides a cash match under Internal Revenue Code Section 401(a) for employees participating in the deferred compensation plan. The match amount for an employee was established at 50.0 percent of the voluntary contributions to the deferred compensation plan. During the current fiscal year, the maximum match was $20 per pay period or $40 per month. The fair value of assets in the cash match savings plan as of June 30, 2019, was $479.3 million, which is also excluded from the accompanying financial statements.

Most employees of the Commonwealth’s colleges and universities may participate in the Commonwealth’s deferred compensation plan in accordance with Internal Revenue Code Section 457(b) and/or the institution’s deferred compensation plan in accordance with Internal Revenue Code Section 403(b). Under either plan, the
The deferred compensation plan for the University of Virginia Medical Center (part of the University of Virginia – nonmajor component unit) employees hired on or after September 30, 2002, allows employee contributions up to 4.0 percent of their salary and the employer match is 50.0 percent of the 4.0 percent deferral not to exceed 2.0 percent of the employees’ salary. Employer contributions under this plan were approximately $4.6 million for fiscal year 2019. The University of Virginia provides executive deferred compensation retirement benefits for certain officers and executives of the University and the University Medical Center. The University makes contributions on behalf of each participant each plan year as determined by the Board of Visitors. The University contributed $1.9 million to these accounts for fiscal year 2019.

The Virginia Housing Development Authority (major component unit) and the Virginia Resources Authority (major component unit) have deferred compensation plans available to all employees created in accordance with Internal Revenue Code Sections 457(b). The plan permits participants to defer a portion of their salary or wages until future years. The deferred compensation is not available to employees until termination, retirement, or death. The assets of the plan are in an irrevocable trust with an external trustee and, accordingly, no assets or liabilities are reflected in the accompanying financial statements.

The Virginia Port Authority (VPA) (nonmajor component unit) offers three deferred compensation plans and two matching savings plans under Internal Revenue Code Sections 457 and 401(a), respectively. For additional information, please see the Authority’s website at www.portofvirginia.com.

The Assistive Technology Loan Fund Authority (nonmajor component unit) employees contribute an amount of their choosing into Deferred Compensation Plans administered by the Virginia Retirement System and into a qualified 403(b) plan.

21. STATE NON-ARBITRAGE POOL

The Commonwealth sponsors the Virginia State Non-Arbitrage Program (SNAP) for use by the Commonwealth and local governments to invest bond proceeds. The Treasury Board is responsible for the oversight of SNAP, procuring the following services: investment management, program administration, arbitrage rebate and calculation, and custodial and depository services. The Commonwealth does not have fiduciary responsibility for SNAP.

The SNAP fund is a local government investment pool. PFM Asset Management LLC serves as the investment adviser of the SNAP fund. The SNAP individual investment portfolios are the responsibility of the SNAP investment manager and the governments investing proceeds in the portfolios. These investments are held solely in the SNAP participants’ names. Since the Commonwealth has no fiduciary relationship with local governmental entities participating in the plan, these assets of $2.9 billion are not included in the financial statements.

22. COMMITMENTS

A. Construction Projects

Primary Government

Highway Projects

As of June 30, 2019, the Department of Transportation had contractual commitments of approximately $6.2 billion for construction of various highway projects. Funding for these expenditures is expected to be provided as follows: (1) Federal funds – approximately 13.6 percent or $842.0 million, (2) State funds – approximately 70.5 percent or $4.4 billion, and (3) Proceeds from Bonds – approximately 15.9 percent or $977.0 million.

Mass Transit Projects

As of June 30, 2019, the Department of Rail and Public Transportation had contractual commitments of approximately $324.0 million for various public transportation, rail preservation, and rail enhancement projects. Funding of the future expenditures is expected to be as follows: 1) State funds – approximately 92.3 percent or $299.2 million, and 2) Federal funds – approximately 7.7 percent or $24.8 million.

Wastewater Treatment Projects

As of June 30, 2019, the Department of Environmental Quality was committed to grant contracts with localities to reimburse a portion of construction costs for nutrient reduction facilities at wastewater treatment plants totaling $7.3 million provided by bond proceeds and the Water Quality Improvement Fund.

Other Construction Projects

As of June 30, 2019, the Department of General Services had construction commitments of approximately $22.9 million.

As of June 30, 2019, the Department of Behavioral Health and Developmental Services had construction contractual commitments of approximately $113.7 million.

As of June 30, 2019, the Department of Military Affairs had construction contractual commitments of approximately $19.1 million.

As of June 30, 2019, the Department of Forensic Science had contractual commitments of approximately $6.4 million and non-contractual commitments of $5.6 million for construction projects.
As of June 30, 2019, the Department of Corrections had construction commitments of approximately $21.1 million.

As of June 30, 2019, the Department of Veterans Services had contractual commitments of $12.6 million and non-contractual commitments of $118.6 million for construction projects.

As of June 30, 2019, the Department of Conservation and Recreation had contractual commitments of $5.6 million for construction projects.

Component Units

Port Projects

As of June 30, 2019, the Virginia Port Authority (nonmajor) was committed to construction contracts totaling $534.4 million.

Wallops Island Project

As of June 30, 2019, the Virginia Commercial Space Flight Authority (nonmajor) was committed to construction programs totaling $14.1 million, approximately $7.3 million of which will be reimbursable under separate private and federal contract agreements and approximately $1.7 million of which are funded by the Commonwealth.

Treatment Plant

As of June 30, 2019, the Hampton Roads Sanitation District Commission (nonmajor) was committed to construction contracts totaling $167.2 million.

Higher Education Institutions

Colleges and universities (nonmajor) had contractual commitments as of June 30, 2019, of approximately $1.8 billion. Higher education foundations’ commitments total approximately $98.7 million. These are primarily for construction contracts.

B. Operating Leases

The Commonwealth has entered into numerous agreements to lease land, buildings, and equipment. Most of the operating leases contain the provision that the Commonwealth may renew the operating leases at the expiration date of the lease on a month-to-month basis. In most cases, management expects that in the normal course of business, leases will be renewed or replaced by other leases of a similar nature. Rental expense for the primary government under these operating leases for the year ended June 30, 2019, was $78.8 million for governmental activities (including internal service funds) and $29.7 million for business-type activities. Rental expense for the discrete component units (excluding foundations) for the year ended June 30, 2019, was $129.6 million. The Commonwealth has, as of June 30, 2019, the following minimum rental payments due under the above leases (dollars in thousands):

<table>
<thead>
<tr>
<th>Year</th>
<th>Governmental Activities</th>
<th>Business-type Activities</th>
<th>Component Units (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>$78,252</td>
<td>$28,592</td>
<td>$84,861</td>
</tr>
<tr>
<td>2021</td>
<td>68,431</td>
<td>25,379</td>
<td>67,757</td>
</tr>
<tr>
<td>2022</td>
<td>59,299</td>
<td>20,598</td>
<td>56,588</td>
</tr>
<tr>
<td>2023</td>
<td>43,820</td>
<td>15,628</td>
<td>47,413</td>
</tr>
<tr>
<td>2024</td>
<td>35,568</td>
<td>11,626</td>
<td>37,182</td>
</tr>
<tr>
<td>2025-2029</td>
<td>80,895</td>
<td>19,997</td>
<td>94,809</td>
</tr>
<tr>
<td>2030-2034</td>
<td>6,924</td>
<td>—</td>
<td>7,103</td>
</tr>
<tr>
<td>2035-2039</td>
<td>263</td>
<td>—</td>
<td>1,119</td>
</tr>
<tr>
<td>2040-2044</td>
<td>25</td>
<td>—</td>
<td>925</td>
</tr>
<tr>
<td>2045-2049</td>
<td>30</td>
<td>—</td>
<td>925</td>
</tr>
<tr>
<td>2050-2054</td>
<td>—</td>
<td>—</td>
<td>295</td>
</tr>
<tr>
<td>2055-2059</td>
<td>—</td>
<td>—</td>
<td>25</td>
</tr>
<tr>
<td>2060-2064</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>2065-2069</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>$373,507</td>
<td>$121,820</td>
<td>$399,947</td>
</tr>
</tbody>
</table>

Note (1): The above amounts exclude operating lease obligations of foundations.

<table>
<thead>
<tr>
<th>Year</th>
<th>Foundations (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>$7,722</td>
</tr>
<tr>
<td>2021</td>
<td>7,406</td>
</tr>
<tr>
<td>2022</td>
<td>6,917</td>
</tr>
<tr>
<td>2023</td>
<td>6,105</td>
</tr>
<tr>
<td>2024</td>
<td>5,767</td>
</tr>
<tr>
<td>Thereafter</td>
<td>36,646</td>
</tr>
<tr>
<td>Total</td>
<td>$70,563</td>
</tr>
</tbody>
</table>

Note (2): Foundations represent FASB reporting entities defined in Note 1.B. Rental expense for the year ended June 30, 2019, was approximately $7.8 million.

Lease agreements are for various terms and contain nonappropriation clauses indicating that continuation of the lease is subject to funding by the General Assembly.

C. Investment Commitments – Virginia Retirement System

The Virginia Retirement System extends investment commitments in the normal course of business, which, as of June 30, 2019, amounted to $15.3 billion.

D. Virginia Transportation Infrastructure Bank

Section 33.2-1500 of the Code of Virginia states the Virginia Transportation Infrastructure Bank is intended to help alleviate a critical financing need for present and future highways within the Commonwealth. This includes toll facilities; mass transit; freight, passenger, and commuter rail; and port, airport and other transportation facilities.
As of June 30, 2019, $156.0 million included as Loans Receivable in the accompanying statements represents loans to the City of Chesapeake for the Dominion Boulevard Project and Loudoun County for the Pacific Boulevard Project. Additionally, loans have been approved for the Chesapeake Bay Bridge and Tunnel District for the Parallel Thimble Shoal Tunnel, the City of Alexandria for the Potomac Yard Metrorail Station, and 95 Express Lanes LLC for the 395 Express Lanes Northern Extension, but no disbursements were made as of June 30, 2019. A disbursement of $44.6 million was made for the 395 Express Lanes Northern Extension in July 2019. All loans are coordinated through the Virginia Resources Authority (major component unit).

E. Tobacco Grants

The Tobacco Region Revitalization Commission (nonmajor component unit) had $41.8 million in grant award commitments not reflected in the accompanying financial statements since eligibility requirements were not met as of June 30, 2019, in accordance with GASB Statement No. 33.

F. Other Commitments

Primary Government

As of June 30, 2019, the Department of Behavioral Health and Developmental Services had contractual commitments of approximately $127.1 million.

As of June 30, 2019, the Department of Corrections had contractual commitments of approximately $227.2 million and non-contractual commitments of approximately $20.3 million for detention services and medical care.

As of June 30, 2019, the Virginia Department of Health had commitments of approximately $40.0 million to localities, trauma centers, grants to rescue squads, and water supply assistance grants.

As of June 30, 2019, the Department of Motor Vehicles had contractual commitments of approximately $32.8 million for security technology services.

As of June 30, 2019, the Virginia Department of Transportation had contractual commitments of approximately $978.0 million for individual contracts awarded with a contract value of $1.0 million or more for operational services, facilities, tolling services and other non-highway construction type contracts.

As of June 30, 2019, the Virginia Employment Commission had contractual commitments of approximately $8.8 million for information systems modernization projects and approximately $6.2 million for other non-contractual commitments.

As of June 30, 2019, the Enterprise Applications (internal service fund) had $40.6 million in contractually obligated commitments for the Human Capital Management replacement project.

As of June 30, 2019, the Property Management (internal service fund) had a signed lease agreement for a build to suit building for the Department of Corrections with total lease payments of $5.6 million.

The Virginia College Savings Plan (major enterprise fund) administers the Prepaid529 Program. As of June 30, 2019, the Program had $153.3 million in private equity commitments.

The Virginia Wireless E-911 (nonmajor enterprise fund) had $4.5 million in outstanding grants awarded but not yet disbursed to localities as of June 30, 2019, since all of the eligibility criteria have not been met in accordance with GASB Statement No. 33.

Component Units

The Virginia Housing Development Authority (major) and Virginia Resources Authority (major) had $1.1 billion and $215.0 million, respectively, in commitments to fund new loans not reflected in the accompanying financial statements since eligibility requirements were not met as of June 30, 2019, in accordance with GASB Statement No. 33.

The Virginia Small Business Financing Authority (nonmajor) had six million in loan commitments to banks and borrowers not reflected in the accompanying financial statements since eligibility requirements were not met as of June 30, 2019, in accordance with GASB Statement No. 33.

23. ACCRUED LIABILITY FOR COMPENSATED ABSENCES

Employees accrue annual leave at a rate of four to nine hours semimonthly, depending on their length of service. The maximum leave accumulation is dependent upon years of service, but in no case may it exceed 432 hours at the end of the leave year. The maximum compensation for annual leave balances is also dependent upon years of service, but in no case may an employee be compensated for more than 336 hours upon separation.

All employees hired after January 1, 1999, are required to enroll in the Virginia Sickness and Disability Program (VSDP) (see Note 18). Under the VSDP, employees receive a specified number of sick and personal leave hours, depending on their length of service, and any balances at the end of the leave year revert. Individuals employed at January 1, 1999, had the option of converting to the VSDP or remaining in the traditional sick leave plan. If converting, the employee’s sick leave balance could be used to purchase retirement credits or be converted to disability credits. If an employee opted to remain in the traditional sick leave program, sick leave accrues at a rate of five hours semimonthly. Employees who leave state service after a minimum of five years employment receive the lesser of 25.0 percent of the value of their disability credits or accumulated sick leave at their current earnings rate or $5,000. All employees leaving state service are paid for accrued annual leave up to the maximum leave year limit at their current earnings rate.
In conformance with Section C60 of the GASB Codification, the monetary value of accumulated vacation, compensatory, overtime, recognition, and sick leave payable upon termination is included in the accompanying financial statements and is reported as Compensated Absences. In the government-wide statements, proprietary fund statements, and discrete component unit fund statements, compensated absence amounts are segregated into two components—the amount due within one year and the amount due in more than one year. Compensated absences due within one year consist of an estimate of the amount that will be used by active employees for paid time off and/or paid upon termination, plus the actual amount paid after June 30 for employees terminating on or before June 30. In the governmental fund statements, amounts to be paid from expendable resources are recognized as fund liabilities in the applicable governmental fund types as long-term liabilities and represent payments to employees for separations that occurred on or before June 30. Amounts not payable from expendable resources are reflected in the governmental activities column in the Government-wide Statement of Net Position (see Note 28). All amounts related to the fiduciary funds are recognized in those funds.

The liability as of June 30, 2019, was computed using salary rates effective at that date, and represents vacation, compensatory, overtime, recognition, and sick leave earned, or disability credits held by employees, up to the allowable ceilings.

24. POLLUTION REMEDIATION OBLIGATIONS

The Commonwealth has pollution remediation obligations of $10.4 million, of which $1.9 million is due within one year. With the exception of the Department of Environmental Quality (DEQ), agencies estimated future obligations based on professional consultant estimates and/or historical project expenses of similar projects; however, there is the potential for change in estimates due to price increases or reductions, technology, or applicable laws and regulations. Remediations for DEQ are not estimates but contractual obligations between the Commonwealth and the U.S. Environmental Protection Agency (EPA), and any change due to a reconciliation of incurred costs requires mutual consent and contract amendment.

The estimated Commonwealth pollution remediation liability relates to the anticipated cost of hazardous waste removal, cleanup relating to leakage of underground storage tanks, soil and groundwater contaminations, dump site cleanups, asbestos, lead contamination, mold remediation and remediation relating to superfund state contracts.

Agencies involved in remediation include:

- Department of Conservation and Recreation (DCR)
- Department of Corrections (DOC)
- Department of Emergency Management (VDEM)
- Department of Environmental Quality (DEQ)
- Department of Juvenile Justice (DJJ)
- Department of Transportation (VDOT)

A Facility Lead Agreement was signed between the EPA and VDOT to resolve an issue concerning the storage of lab wastewater in an outdoor lined surface impoundment that operated between 1979 and 1983 for which contamination is present in soil and groundwater. DOC was fined by the EPA in September/October 2003. DOC proposed to conduct a Supplemental Environmental Project (SEP) which included the formation of the Pollution Prevention Section of the Environmental Services Unit, disclosure of all environmental deficiencies to both the EPA and DEQ and corrections of those deficiencies.

The following pollution remediation outlays could not reasonably be estimated as of June 30, 2019:

- VDEM relating to cleanup of an emergency fuel storage facility
- DJJ relating to petroleum storage tank removal
- VDOT relating to groundwater contamination
25. INSURANCE

A. Self-Insurance

The Commonwealth maintains three types of self-insurance plans. The first type of self-insurance is a health care plan administered by the Department of Human Resource Management for Commonwealth employees. The plan is accounted for in the Health Care Internal Service Fund. Interfund premiums are accounted for as internal activity receipts from other funds. As of June 30, 2019, $131.4 million is reported as the estimated claims payable for this fund, which is undiscounted as nearly all healthcare claims are current in nature. The estimated liability is based upon actual claims that have been submitted as well as actuarially determined claims incurred but not reported as described in Note 1.W. Changes in the balances of claims liabilities (dollars in thousands) during the current and prior fiscal years are as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Balance July 1,</th>
<th>Current Year Claims and Changes in Estimates</th>
<th>Claim Payments</th>
<th>Balance June 30, (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018-2019</td>
<td>$116,172</td>
<td>$1,446,334</td>
<td>($1,433,122)</td>
<td>$131,384</td>
</tr>
<tr>
<td>2017-2018</td>
<td>$112,029</td>
<td>$1,322,571</td>
<td>($1,318,428)</td>
<td>$118,172</td>
</tr>
</tbody>
</table>

(1) Of the balance shown above, $74.3 million is due within one year.

For workers’ compensation, the Commonwealth assumes the full risk of claims filed. For tort and automobile, liability is assumed at a maximum of $2.0 million per occurrence. Medical malpractice is assumed at the maximum per occurrence recovery limited as stated in Section 8.01-581.15 of the Code of Virginia. Risk Management purchases commercial insurance to protect state-owned property with deductibles as stated in the insurance policies.

The third type of plan, Line of Duty, is administered by the Department of Human Resource Management for Line of Duty recipients. Per the amended Line of Duty Act Section 9.1-401 of the Code of Virginia, the Department of Human Resource Management is responsible for administration of the premium-free health benefits provided to eligible Line of Duty recipients. The plan is accounted for in the Line of Duty Internal Service Fund. All eligible employees, former employees, and eligible family members will be covered under one program, the Line of Duty Health Benefit Plans. Participating or non-participating refers to whether the employer participates in the Line of Duty Death and Health Benefits Trust Fund, administered by VRS. All state agencies are participating employers, but localities can be either participating or non-participating. As of June 30, 2019, $617,818 is reported as the claims payable for the fund for state employees and participating localities, which is undiscounted as nearly all healthcare claims are current in nature. Changes in the balances of claims liabilities (dollars in thousands) during the current and prior fiscal years are as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Balance July 1,</th>
<th>Current Year Claims and Changes in Estimates</th>
<th>Claim Payments</th>
<th>Balance June 30, (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018-2019</td>
<td>$485</td>
<td>$7,200</td>
<td>($7,067)</td>
<td>$618</td>
</tr>
<tr>
<td>2017-2018</td>
<td>$—</td>
<td>$3,729</td>
<td>($3,244)</td>
<td>$485</td>
</tr>
</tbody>
</table>

(1) Of the balance shown above, $74.3 million is due within one year.

The Commonwealth has not had any insurance settlements exceed the coverage during the past three years.

University of Virginia employees have the option to participate in the University’s self-funded, comprehensive medical care benefits program. The cost of medical care is paid out of employee and employer contributions. Claims and expenses are reported when it is probable that a loss has occurred, and the amount of the loss can be reasonably estimated. Those losses include an estimate of claims that have been incurred but not reported and
the future costs of handling claims. The estimated liability for outstanding claims on June 30, 2019, was $14.4 million. The University has contracted with several third-party claims administrators: Aetna, for its medical claims, United Concordia for its dental claims, and OptumRx for its pharmacy claims.

As of June 30, 2019, the Virginia Commonwealth University Health System Authority (Authority) (a blended component unit of the Virginia Commonwealth University – nonmajor component unit) reports the following claims payable amounts: estimated workers’ compensation claims of $13.1 million and estimated losses on malpractice claims of $2.9 million. Aries Insurance Captive (component unit of the Authority) reports claims payable of $22.0 million for estimated losses on malpractice claims. Virginia Premier Health Plan (component unit of the Authority) reports claims payable of $174.8 million for estimated medical claims payable. Additional information on claims payable can be found in the Authority’s separately issued financial statements.

Virginia International Terminals, LLC (VIT) (a blended component unit of the Virginia Port Authority – nonmajor) is partially self-insured for certain workers’ compensation claims. The Authority maintains insurance coverage of $5.0 million per claim, but is obligated to pay the first $1.0 million of any individual’s claims per incident. The Authority bears some self-insurance risk for claims cost in excess of employee premiums/contributions received. Pursuant to a joint arrangement with the Virginia Port Authority, (VPA) (nonmajor) the entity carries stop loss insurance to mitigate exposure to significant claims. The stop loss policy is on a calendar year basis, with renewals effective each January 1. During the calendar year 2018 and 2019, the individual claim cost limit (deductible) under the policy for the Authority was $125,000. The aggregate deductible for VIT and VPA combined claims in excess of the $125,000 individual limit was $6.4 million for calendar year 2019 and $9.5 million for calendar year 2018.

B. Public Entity Risk Pools

The Commonwealth administers three types of public entity risk pools for the benefit of local governmental units: healthcare, risk management, and line of duty insurance. The Local Choice Health Care plan was established to make comprehensive healthcare insurance available to localities and political subdivisions at affordable rates and with stable premiums. During the fiscal year, there were 441 local government units participating in the pool. This includes 67 school districts, 37 counties, 130 cities/towns, and 207 other subdivisions. This program is accounted for in the Local Choice Health Care Enterprise Fund (nonmajor).

The Department of Human Resource Management, under Section 2.2-1204 of the Code of Virginia, has the authority to design, set rates, and administer the Local Choice Health Care fund. The pool's standard contract period is one year. However, a member group may withdraw on the last day of any month with three month’s written notice. Contributions are based on the current necessary contribution and the amortization of experience adjustments in the pool. As of June 30, 2019, $46.8 million is reported as the actuarially determined estimated claims payable for this fund based on claims incurred but not reported.

The actuarial liability is determined for the membership pool in total and then adjusted for each locality based on individual historic and demographic data. If the pool’s assets were to be exhausted, the program participants would share the responsibility for any liabilities or deficits.

The Department of the Treasury, Division of Risk Management administers the VARisk and VARisk2 risk management programs for political subdivisions, constitutional officers and others in accordance with Section 2.2-1839 of the Code of Virginia. These pools were established to provide an economical, low-cost alternative to the commercial insurance market for the Commonwealth’s political subdivisions. These risk programs are accounted for in the Risk Management Enterprise Fund (nonmajor). The pool is established subject to approval by the Governor. It may be insurance, self-insurance, or any combination thereof, and must provide protection and legal defense against liability. Participation is voluntary and open to those identified in Section 2.2-1839 of the Code of Virginia. As of June 30, 2019, there were 508 units of local government in the pool, including 16 towns and 25 counties. The remaining 467 units include a large variety of boards, commissions, authorities, and special districts.

The VARisk program is comprised of constitutional officers and regional jails, and participation is not mandated by the Code of Virginia. However, the Compensation Board (part of the primary government) requires participation by all constitutional officers.

The VARisk2 program is comprised of local governments and has a minimum membership period of one year. However, a member group can cancel membership and withdraw from the plan on their coverage anniversary date or at the end of the fiscal year with 30 days’ notice.

No excess insurance or reinsurance is provided. The risk assumed by the VARisk and VARisk2 pool for liability is $1.0 million per occurrence, with the exception of sheriffs and their deputies, which is $1.5 million per occurrence.

As of June 30, 2019, $35.5 million and $4.0 million is reported as estimated claims payable for the VARisk and the VARisk2 programs, respectively. These figures are actuarially determined for the funds in total and are reported at gross. They are based on the estimated ultimate cost of settling the claims, including the effects of inflation and other societal and economic factors. They do not reflect possible reimbursements for insurance recoveries.
Per the amended Line of Duty Act Section 9.1-401 of the Code of Virginia, the Virginia Department of Human Resource Management (DHRM) is responsible for administration of the premium-free health benefits provided to eligible LODA recipients. All eligible employees, former employees, and eligible family members will be covered under one program, the LODA Health Benefits Plans. As of June 30, 2019, $1.5 million is reported as the actuarially determined estimated claims payable for the non-participating localities reported in this fund based on claims incurred but not reported.
The following schedule (dollars in thousands) shows the changes in claims liabilities for the past two fiscal years.

<table>
<thead>
<tr>
<th></th>
<th>Local Choice Health Care</th>
<th>Risk Management</th>
<th>Line of Duty</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>June 30, 2019</td>
<td>June 30, 2018</td>
<td>June 30, 2019</td>
</tr>
<tr>
<td>Unpaid Claims and Claim</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjustment Expenses at Beginning of Fiscal Year</td>
<td>$ 40,601</td>
<td>$ 38,046</td>
<td>$ 36,156</td>
</tr>
<tr>
<td>Incurred Claims and Claim Adjustment Expenses:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provision for Insured Events of the Current Fiscal Year</td>
<td>450,166</td>
<td>424,357</td>
<td>14,151</td>
</tr>
<tr>
<td>Changes in Provision for Insured Events of Prior Fiscal Years</td>
<td>—</td>
<td>—</td>
<td>(951)</td>
</tr>
<tr>
<td>Total Incurred Claims and Adjustment Expenses</td>
<td>450,166</td>
<td>424,357</td>
<td>13,200</td>
</tr>
<tr>
<td>Payments:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Claims and Claim Adjustment Expenses Attributable to Insured Events of the Current Fiscal Year</td>
<td>443,931</td>
<td>421,802</td>
<td>1,075</td>
</tr>
<tr>
<td>Claims and Claim Adjustment Expenses Attributable to Insured Events of the Prior Fiscal Year</td>
<td>—</td>
<td>—</td>
<td>9,302</td>
</tr>
<tr>
<td>Total Payments</td>
<td>443,931</td>
<td>421,802</td>
<td>10,377</td>
</tr>
<tr>
<td>Change in Provision for Discounts</td>
<td>—</td>
<td>—</td>
<td>530</td>
</tr>
<tr>
<td>Total Unpaid Claims and Claim Adjustment Expenses at End of the Fiscal Year (Discounted) (1) (2) (3) (4)</td>
<td>$ 46,836</td>
<td>$ 40,601</td>
<td>$ 39,509</td>
</tr>
<tr>
<td>Total Unpaid Claims and Claim Adjustment Expenses at End of the Fiscal Year (Undiscounted)</td>
<td>$ 46,836</td>
<td>$ 40,601</td>
<td>$ 41,375</td>
</tr>
</tbody>
</table>

Note (1): The entire balance for Local Choice Health Care, $46,836 (dollars in thousands) is due within one year.

Note (2): Of the balance shown above for Risk Management, $10,872 (dollars in thousands) is due within one year.

Note (3): The entire balance for Line of Duty, $1,513 (dollars in thousands) is due within one year.

Note (4): The interest rate used for discounting is 1.9 percent.
The following table (dollars in thousands) summarizes Accounts Payable as of June 30, 2019.

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Salary / Wage</th>
<th>Retainage</th>
<th>Other</th>
<th>Foundations (1)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>$270,747</td>
<td>$109,496</td>
<td>$14</td>
<td>—</td>
<td>$380,257</td>
</tr>
<tr>
<td>Major Special Revenue Funds:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commonwealth Transportation</td>
<td>473,611</td>
<td>35,012</td>
<td>2,629</td>
<td>—</td>
<td>511,252</td>
</tr>
<tr>
<td>Federal Trust</td>
<td>67,873</td>
<td>16,723</td>
<td>1,119</td>
<td>—</td>
<td>85,715</td>
</tr>
<tr>
<td>Literary</td>
<td>1</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>1</td>
</tr>
<tr>
<td>Nonmajor Governmental Funds</td>
<td>54,698</td>
<td>15,842</td>
<td>5,803</td>
<td>298</td>
<td>76,641</td>
</tr>
<tr>
<td>Major Enterprise Funds:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia Lottery (2)</td>
<td>11,065</td>
<td>1,875</td>
<td>—</td>
<td>5,512</td>
<td>18,452</td>
</tr>
<tr>
<td>Virginia College Savings Plan</td>
<td>214</td>
<td>590</td>
<td>—</td>
<td>200</td>
<td>1,004</td>
</tr>
<tr>
<td>Unemployment Compensation</td>
<td>59</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>59</td>
</tr>
<tr>
<td>Nonmajor Enterprise Funds</td>
<td>52,320</td>
<td>7,292</td>
<td>570</td>
<td>3</td>
<td>60,185</td>
</tr>
<tr>
<td>Internal Service Funds</td>
<td>90,121</td>
<td>3,157</td>
<td>490</td>
<td>—</td>
<td>93,768</td>
</tr>
<tr>
<td>Private Purpose Trust Funds</td>
<td>—</td>
<td>1</td>
<td>—</td>
<td>—</td>
<td>36</td>
</tr>
<tr>
<td>Pension and Other Employee Benefit Trust Funds (3)</td>
<td>3,468</td>
<td>2,728</td>
<td>—</td>
<td>40,844</td>
<td>47,049</td>
</tr>
<tr>
<td>Agency Funds</td>
<td>3,153</td>
<td>—</td>
<td>—</td>
<td>5,845</td>
<td>8,998</td>
</tr>
<tr>
<td><strong>Total Primary Government (4)</strong></td>
<td>$1,027,330</td>
<td>$192,716</td>
<td>$10,625</td>
<td>$53,070</td>
<td>$1,283,741</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Salary / Wage</th>
<th>Retainage</th>
<th>Other</th>
<th>Foundations (1)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virginia Housing Development Authority</td>
<td>$1,388</td>
<td>$5,560</td>
<td>—</td>
<td>$20,015</td>
<td>$26,963</td>
</tr>
<tr>
<td>Virginia Public School Authority</td>
<td>71</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>71</td>
</tr>
<tr>
<td>Virginia Resources Authority</td>
<td>95</td>
<td>4</td>
<td>—</td>
<td>—</td>
<td>99</td>
</tr>
<tr>
<td>Virginia College Building Authority</td>
<td>14</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>14</td>
</tr>
<tr>
<td>Nonmajor Component Units</td>
<td>725,121</td>
<td>501,970</td>
<td>62,323</td>
<td>5,641</td>
<td>1,425,086</td>
</tr>
<tr>
<td><strong>Total Component Units</strong></td>
<td>$726,689</td>
<td>$607,534</td>
<td>$62,323</td>
<td>$25,656</td>
<td>$1,452,233</td>
</tr>
</tbody>
</table>

Note (1): Foundations represent FASB reporting entities defined in Note 1.B.

Note (2): Other Accounts Payable for the Virginia Lottery primarily represents unclaimed prizes attributable to multi-state games and player subscription wallets.

Note (3): Other Accounts Payable for the Pension and Other Employee Benefit Trust Fund consists of $23,978 (dollars in thousands) in investment management fees and $16,866 (dollars in thousands) in program benefit liabilities.

Note (4): Fiduciary liabilities of $56,407 (dollars in thousands) are not included in the Government-wide Statement of Net Position. In addition, governmental fund liabilities of $128,259 (dollars in thousands) are included in the Government-wide Statement of Net Position, but excluded from the above amounts.
27. OTHER LIABILITIES

The following tables (dollars in thousands) summarize Other Liabilities as of June 30, 2019.

### Primary Government

<table>
<thead>
<tr>
<th></th>
<th>General</th>
<th>Commonwealth Transportation</th>
<th>Federal Trust</th>
<th>Nonmajor Governmental Funds</th>
<th>Virginia Lottery</th>
<th>Virginia College Savings Plan (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lottery Prizes Payable</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Medicaid Payable</td>
<td>469,505</td>
<td>$</td>
<td>963,696</td>
<td>128,690</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Family Access to Medical Insurance</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Tax Refunds Payable</td>
<td>892,370</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Insurance Carrier Surety Deposit</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Deposits Pending Distribution</td>
<td>3,651</td>
<td>1,239</td>
<td>1</td>
<td>5,027</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Car Tax Payable</td>
<td>263,025</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Other Liabilities</td>
<td>161</td>
<td>3</td>
<td>7</td>
<td>664</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td><strong>Total Other Liabilities</strong></td>
<td>$1,632,522</td>
<td>$1,242</td>
<td>$990,608</td>
<td>$134,381</td>
<td>$70,036</td>
<td>$11,853</td>
</tr>
</tbody>
</table>

### Nonmajor Enterprise Funds

<table>
<thead>
<tr>
<th></th>
<th>Pension and Other Employee Benefit Trust Funds (2)</th>
<th>Agency Funds</th>
<th>Total Primary Government (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lottery Prizes Payable</td>
<td>$</td>
<td>$</td>
<td>$1,561,891</td>
</tr>
<tr>
<td>Medicaid Payable</td>
<td>$</td>
<td>$</td>
<td>$30,714</td>
</tr>
<tr>
<td>Family Access to Medical Insurance Security Payable</td>
<td>$</td>
<td>$</td>
<td>$892,370</td>
</tr>
<tr>
<td>Tax Refunds Payable</td>
<td>$</td>
<td>$</td>
<td>$450,702</td>
</tr>
<tr>
<td>Insurance Carrier Surety Deposit</td>
<td>$</td>
<td>$</td>
<td>$263,025</td>
</tr>
<tr>
<td>Deposits Pending Distribution</td>
<td>136</td>
<td>23</td>
<td>$201,408</td>
</tr>
<tr>
<td>Car Tax Refund Payable</td>
<td>$</td>
<td>$</td>
<td>$97,616</td>
</tr>
<tr>
<td>Other Liabilities</td>
<td>$201,408</td>
<td>$3,582,365</td>
<td>$216,011</td>
</tr>
<tr>
<td><strong>Total Other Liabilities</strong></td>
<td>$136</td>
<td>$23</td>
<td>$540,156</td>
</tr>
</tbody>
</table>

Note (1): Other Liabilities of $11,853 (dollars in thousands) reported by the Virginia College Savings Plan represent amounts associated with pending investment trades and program distributions payable.

Note (2): Other Liabilities of $201,408 (dollars in thousands) reported in Pension and Other Employee Benefit Trust Funds are made up of $115,851 (dollars in thousands) in other funds managed by the System; $80,925 (dollars in thousands) in pending investment transactions, including $69,700 (dollars in thousands) in net foreign exchange contracts payable, and $7,626 (dollars in thousands) in other investment payables; $2,635 (dollars in thousands) in foreign taxes payables related to the System benefit plans; $964,000 in dividends payable related to the System benefit plans; and $4,632 (dollars in thousands) in other payables related to the System benefit plans.

Note (3): Fiduciary liabilities of $741,564 (dollars in thousands) are not included in the Government-wide Statement of Net Position. Governmental fund liabilities of $78,617 (dollars in thousands) are included in the Government-wide Statement of Net Position, but excluded from the above amounts.

### Component Units

<table>
<thead>
<tr>
<th>Virginia Housing Development Authority</th>
<th>Virginia Public School Authority</th>
<th>Virginia Resources Authority</th>
<th>Virginia College Building Authority</th>
<th>Nonmajor Component Units (4)</th>
<th>Total Component Units (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accrued Interest Payable</td>
<td>$27,742</td>
<td>$53,975</td>
<td>$26,825</td>
<td>$91,456</td>
<td>$94,781</td>
</tr>
<tr>
<td>Deposits Pending Distribution</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$560,889</td>
<td>$560,889</td>
</tr>
<tr>
<td>Short-term Debt</td>
<td>445,300</td>
<td>$</td>
<td>$</td>
<td>$403,079</td>
<td>$848,379</td>
</tr>
<tr>
<td>Grants Payable</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$7,727</td>
<td>$7,727</td>
</tr>
<tr>
<td>Other Liabilities</td>
<td>33,632</td>
<td>$</td>
<td>$1,187</td>
<td>$2,442</td>
<td>$318,214</td>
</tr>
<tr>
<td><strong>Total Other Liabilities</strong></td>
<td>$506,674</td>
<td>$53,975</td>
<td>$28,012</td>
<td>$93,898</td>
<td>$1,384,690</td>
</tr>
</tbody>
</table>

Note (4): Other Liabilities of nonmajor component units are predominantly comprised of derivative instruments reported by the following: University of Virginia of $35,068 (dollars in thousands), Virginia Commonwealth University Health System Authority (blended component unit of Virginia Commonwealth University) of $45,200 (dollars in thousands), and foundations of higher education institutions of $51,478 (dollars in thousands). Other Liabilities also includes a reserve for medical malpractice reported by a foundation of the University of Virginia of $71,561 (dollars in thousands).
Medicaid Payable

Medicaid Payable represents services rendered but not billed by providers and potential liability resulting from cost reports not settled as of year-end. Providers subject to cost settlement are paid in the interim based on estimated per diem or diagnosis related group rates for services.

The Department of Medical Assistance Services (DMAS) estimates, based on past experience, the total amount of Medicaid claims that will be paid from the Medicaid program in the future which relate to services provided before year-end. As of June 30, 2019, the estimated liability related to Medicaid claims totaled $1.6 billion. Of this amount, $469.5 million is reflected in the General Fund (major governmental), $963.7 million in the Federal Trust Special Revenue Fund (major governmental), and $128.7 million in the Health and Social Services Fund (nonmajor special revenue).

Family Access to Medical Insurance Security Payable

DMAS estimates the total amount of claims that will be paid from the Family Access to Medical Insurance Security program in the future which relate to services provided before year-end. As of June 30, 2019, the estimated liability related to claims totaled $30.7 million. Of this amount, $3.8 million is reflected in the General Fund (major governmental) and $26.9 million in the Federal Trust Special Revenue Fund (major governmental).

Tax Refunds Payable

Tax refunds payable represent refunds due on individual tax returns filed for the calendar year ended on or before December 31, 2018, and on business tax returns filed for corporate fiscal years ending on or before June 30, 2019. The individual tax return filing deadline is May 1 of each year for the preceding calendar year. The corporate tax return filing deadline is the 15th day of the fourth month following the close of the corporate fiscal year. Additionally, as of June 30, 2019, $424.3 million represents taxpayer refunds provided pursuant to Chapter 854 (see Note 7).

Car Tax Refund Payable

During the year ended June 30, 1998, the General Assembly passed the Personal Property Tax Relief Act. Under the terms of this legislation, the Commonwealth assumed financial responsibility for a portion, ranging from 12.5 percent to 70.0 percent, of the personal property taxes assessed by localities.

During 2004, the General Assembly modified this legislation. Chapter 1 of Special Session 1 (2004) established a $950.0 million limit on the amount the Commonwealth would appropriate for personal property tax relief, beginning in tax year 2006. It further established that each county, city, and town would receive a fixed percentage of the $950.0 million, with payments to begin on or after July 1, 2006 (fiscal year 2007). The accrued liability amount of $263.0 million reflects payments owed to localities as of June 30 and paid in July.

Termination Benefits

During fiscal year 2019, the Commonwealth laid off 274 employees. The affected employees had the option of volunteering for enhanced retirement benefits or severance benefits. The enhanced retirement benefits option was elected by 44 employees, and the remaining 230 employees elected severance benefits. The severance benefits include salary payments based on years of service and insurance premium payments for health and life insurance. All severance benefits were initiated during fiscal year 2019 and will end no later than June 30, 2020. The benefit cost expended and the outstanding liability as of June 30, 2019 for governmental funds, are $3.7 million and $1.2 million, respectively. Since the severance benefits last for a maximum of 12 months, discounting of future cash flows is unnecessary. Additionally, the estimated payments are calculated using the Department of Human Resources’ Termination Benefits Calculator and actual costs.

Short-term Debt

Short-term debt results from borrowings from anticipation notes, lines of credit, and similar loans with parties external to the primary government. The primary government’s policy is to disclose activity related to short-term borrowings occurring during the fiscal year. For fiscal year 2019, the primary government’s agencies did not participate in short-term borrowings with external parties.

The Commonwealth implemented GASB Statement No. 88, Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements, effective for fiscal year 2019. This statement requires the disclosure of any unused lines of credit for fiscal year 2019. The primary government does not have any unused lines of credit at June 30, 2019.

The Virginia Housing Development Authority (major component unit) has a direct borrowing from a line of credit of $445.3 million. University of Virginia (nonmajor component unit) has commercial paper of $243.9 million primarily used to bridge finance capital projects and, from time to time, fund operations. Virginia Commonwealth University and Virginia Polytechnic Institute and State University (nonmajor component units) have commercial paper of $54.9 million primarily for capital projects. Various higher education institution foundations (nonmajor component units) have lines of credit of $92.4 million primarily for construction or property acquisition. The Virginia Museum of Fine Arts Foundation (nonmajor component unit) has borrowings from lines of credit totaling $11.6 million. Additionally, Fort Monroe Authority (nonmajor component unit) has short-term debt of $260,784 and the Library of Virginia Foundation (nonmajor component unit) has a $18,500 note with a related party. The balance of Other Liabilities is spread among various other funds.
The Virginia Housing Development Authority (major component unit) has an unused line of credit of $100.0 million. The University of Virginia, Virginia Polytechnic Institute and State University, Virginia Commonwealth University Health System Authority (blended component unit of Virginia Commonwealth University), the Hampton Roads Sanitation District Commission, Virginia Port Authority, and the Fort Monroe Authority (nonmajor component units) have unused lines of credit of $500.0 million, $190.0 million, $50.0 million, $1.0 million, $1.0 million, and $500,000, respectively. For the University of Virginia, in the event of default under revolving credit agreements, any outstanding advances, interest, and the value of the promissory note would be due and payable to the various banking institutions.

28. LONG-TERM LIABILITIES

Commonwealth bonds are issued pursuant to Section 9 of Article X of the Constitution of Virginia. Section 9(a) bonds have been issued to redeem previous debt obligations. Section 9(b) bonds have been authorized by the citizens of Virginia through bond referenda to finance capital projects. These bonds are retired through the use of state appropriations. Section 9(c) bonds are issued to finance capital projects which, when completed, will generate revenue to repay the debt. Section 9(a), 9(b), and 9(c) bonds are tax-supported general obligation bonds and are backed by the full faith and credit of the Commonwealth. No other long-term debt obligations are backed by the full faith and credit of the Commonwealth.

Section 9(d) bonds are revenue bonds that are not backed by the full faith and credit of the Commonwealth. These bonds are not general obligation bonds and are not deemed to constitute a legal liability of the Commonwealth. However, this debt may be supported by state appropriations in whole or in part, such as certain debt of the Commonwealth Transportation Board (primary government) and the Virginia Port Authority (nonmajor component unit). Other 9(d) revenue bonds are payable from general revenues of the component units, or from revenues of specific revenue-producing capital projects, such as the teaching hospitals, dormitories, student centers, and dining halls at the various colleges and universities (nonmajor component units).

Certain 9(d) bonds are considered, along with 9(a), 9(b), and 9(c) bonds, to be tax-supported debt of the Commonwealth. Tax-supported debt includes all bonds and short-term debt for which debt service payments are made or are ultimately pledged to be made from tax revenues (net of sinking fund requirements).

Other 9(d) revenue bonds are considered debt not supported by taxes. For this debt, the Commonwealth has no direct or indirect pledge of tax revenues. In certain limited cases, the Commonwealth has made a moral obligation pledge. A government’s moral obligation pledge provides a deficiency make-up for bondholders in the event pledged revenues prove to be insufficient. If a revenue deficiency exists, monies held in a debt service reserve fund are used to pay bondholders. The issuer then requests that the legislative body provide an appropriation to replenish the reserve fund before subsequent debt service is due. The legislative body may, but is not legally required to, replenish the reserve fund.

GASB Statement No. 88, Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements, requires disclosures related to unused lines of credit (see Note 27), direct borrowings and placement debt, and specific disclosures related to debt default. Direct borrowings and placements have terms with an investor or lender and are not offered for public sale.

The following schedule presents the total long-term liabilities of the Commonwealth, and the portion of these amounts which are due within one year, as reported on the Government-wide Statement of Net Position.
## Total Long-term Liabilities
### June 30, 2019

(Dollars in Thousands)

<table>
<thead>
<tr>
<th></th>
<th>Balance At June 30</th>
<th>Amount Due Within One Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Government:</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Governmental Activities:
  General Obligation Bonds: (2) |                    |                           |
  9(b) Public Facilities (3) | $401,873 | $48,140                    |
  9(c) Parking Facilities (3) | 8,567    | 785                        |
  9(c) Transportation Facilities (3) | 6,061 | 2,685                      |
  Total General Obligation Bonds | 416,501 | 51,610                    |

  Nongeneral Obligation Bonds - 9(d):
  Transportation Debt (3) (4) | 4,118,431 | 199,728                    |
  Virginia Public Building Authority (3) | 2,863,660 | 164,670                    |
  Total Nongeneral Obligation Bonds | 6,982,091 | 364,398                    |

  Other Long-term Obligations:
  Net Pension Liability (6) | 3,799,890 | —                          |
  Net OPEB Liability (7) | 802,012 | 6,177                      |
  Total OPEB Liability (7) | 565,448 | 23,248                     |
  Compensated Absences | 317,540 | 196,445                    |
  Capital Lease Obligations | 30,882 | 6,140                      |
  Pollution Remediation Obligations | 10,430 | 1,879                      |
  Installment Purchase Obligations from Direct Borrowings | 114,931 | 15,125                     |
  Economic Development Authority Obligations (3) | 23,366 | 6,795                      |
  Hampton Roads Transportation Accountability Commission (3) (5) | 580,311 | —                          |
  Other Liabilities | 30,322 | 6,456                      |
  Total Other Long-term Obligations | 6,275,132 | 262,265                    |
  Total Governmental Activities (3) | 13,673,724 | 678,273                    |

| Business-type Activities: (1) (5) |                    |                           |
| **Other Long-term Obligations:** |                    |                           |
  Net Pension Liability | 128,005 | —                          |
  Net OPEB Liability | 22,299 | 63                        |
  Total OPEB Liability | 20,042 | 825                      |
  Compensated Absences | 11,070 | 8,427                     |
  Installment Purchase Obligations from Direct Borrowings | 518 | 109                      |
  Tuition Benefits Payable | 1,991,469 | 283,077                    |
  Lottery Prizes Payable | 112,983 | 10,691                    |
  Total Other Long-term Obligations | 2,286,386 | 303,192                    |
  Total Business-type Activities | 2,286,386 | 303,192                    |
  **Total Primary Government** | 15,960,110 | 981,465                    |

Continued on next page
## Total Long-term Liabilities

### June 30, 2019

(Continued from previous page)

<table>
<thead>
<tr>
<th>(Dollars in Thousands)</th>
<th>Balance At June 30</th>
<th>Amount Due Within One Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Component Units:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Obligation Bonds: (2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher Education Fund - 9(c) Bonds (3)</td>
<td>893,106</td>
<td>56,260</td>
</tr>
<tr>
<td>Nongeneral Obligation Bonds:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher Education Institutions - 9(d) (3) (5)</td>
<td>2,867,541</td>
<td>21,961</td>
</tr>
<tr>
<td>Higher Education Institutions - 9(d) from Direct Placements (3) (5)</td>
<td>177,115</td>
<td>3,160</td>
</tr>
<tr>
<td>Virginia College Building Authority (3)</td>
<td>4,566,772</td>
<td>295,885</td>
</tr>
<tr>
<td>Virginia Port Authority - 9(d) (3) (8)</td>
<td>510,896</td>
<td>15,830</td>
</tr>
<tr>
<td>Virginia Housing Development Authority - 9(d) (3) (5)</td>
<td>2,798,010</td>
<td>105,775</td>
</tr>
<tr>
<td>Virginia Housing Development Authority from Direct Placements - 9(d) (3) (5)</td>
<td>244,050</td>
<td>6,700</td>
</tr>
<tr>
<td>Virginia Resources Authority - 9(d) (3) (9)</td>
<td>3,479,670</td>
<td>185,207</td>
</tr>
<tr>
<td>Virginia Public School Authority - 9(d) (3) (5)</td>
<td>3,548,437</td>
<td>251,750</td>
</tr>
<tr>
<td>Virginia Public School Authority from Direct Placements - 9(d) (3) (5)</td>
<td>6,166</td>
<td>—</td>
</tr>
<tr>
<td>Hampton Roads Sanitation District Commission (3) (5)</td>
<td>891,629</td>
<td>84,951</td>
</tr>
<tr>
<td>Virginia Biotechnology Research Partnership Authority (3)</td>
<td>14,220</td>
<td>4,200</td>
</tr>
<tr>
<td>Foundations (5) (10)</td>
<td>1,082,349</td>
<td>141,655</td>
</tr>
<tr>
<td><strong>Total Nongeneral Obligation Bonds</strong></td>
<td>19,995,855</td>
<td>1,117,074</td>
</tr>
<tr>
<td><strong>Other Long-term Obligations:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Pension Liability (11)</td>
<td>2,490,864</td>
<td>—</td>
</tr>
<tr>
<td>Net OPEB Liability (12)</td>
<td>799,030</td>
<td>330</td>
</tr>
<tr>
<td>Total OPEB Liability (13)</td>
<td>479,384</td>
<td>17,273</td>
</tr>
<tr>
<td>Compensated Absences</td>
<td>349,246</td>
<td>263,432</td>
</tr>
<tr>
<td>Capital Lease Obligations (14)</td>
<td>2,312,999</td>
<td>4,091</td>
</tr>
<tr>
<td>Notes Payable (5)</td>
<td>2,011,982</td>
<td>187,100</td>
</tr>
<tr>
<td>Notes Payable from Direct Borrowings (5)</td>
<td>177,906</td>
<td>9,716</td>
</tr>
<tr>
<td>Installment Purchase Obligations from Direct Borrowings</td>
<td>55,259</td>
<td>8,136</td>
</tr>
<tr>
<td>Trust and Annuity Obligations (5) (15)</td>
<td>65,116</td>
<td>—</td>
</tr>
<tr>
<td>Other Liabilities (5)</td>
<td>272,372</td>
<td>9,596</td>
</tr>
<tr>
<td><strong>Total Other Long-term Obligations (Excluding Foundations)</strong></td>
<td>9,014,158</td>
<td>499,674</td>
</tr>
<tr>
<td><strong>Other Long-term Obligations (Foundations): (5) (10)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compensated Absences</td>
<td>16,708</td>
<td>13,606</td>
</tr>
<tr>
<td>Capital Lease Obligations</td>
<td>472</td>
<td>192</td>
</tr>
<tr>
<td>Notes Payable</td>
<td>269,662</td>
<td>30,833</td>
</tr>
<tr>
<td>Trust and Annuity Obligations (15)</td>
<td>73,198</td>
<td>1,908</td>
</tr>
<tr>
<td>Other Liabilities</td>
<td>270,007</td>
<td>15,108</td>
</tr>
<tr>
<td><strong>Total Other Long-term Obligations - Foundations</strong></td>
<td>630,047</td>
<td>61,847</td>
</tr>
<tr>
<td><strong>Total Other Long-term Obligations</strong></td>
<td>9,644,205</td>
<td>561,321</td>
</tr>
<tr>
<td><strong>Total Component Units</strong></td>
<td>30,533,166</td>
<td>1,734,655</td>
</tr>
<tr>
<td><strong>Total Long-term Liabilities</strong></td>
<td>$46,493,276</td>
<td>$2,716,120</td>
</tr>
</tbody>
</table>

1. Pursuant to GASB Statement No. 34, governmental activities include internal service funds. Business-type activities are considered enterprise funds.
2. Total general obligation debt of the Commonwealth is $1.3 billion.
3. Amounts are net of any unamortized discounts and premiums.
4. This debt includes $1.2 billion that is not supported by taxes.
5. This debt is not supported by taxes.
6. This does not include net pension liabilities from fiduciary funds of $65,845.
7. This does not include Net OPEB obligations of $12,134 or Total OPEB obligations of $8,855 from fiduciary funds.
8. This debt includes $285.8 million for bonds that is not supported by taxes.
9. This debt is not supported by taxes; however, $926.5 million is considered moral obligation debt.
10. Foundations represent FASB reporting entities defined in Note 1.B.
11. This includes net pension liabilities that do not relate to the Virginia Retirement System’s State Plan from the Hampton Roads Sanitation District Commission and the Virginia Port Authority of $20.3 million and $15.5 million, respectively. This debt is not supported by taxes.
12. This includes OPEB obligations that do not relate to the Virginia Retirement System’s State Plan from the Hampton Roads Sanitation District, Virginia Port Authority, Virginia Resources Authority, Roanoke Higher Education Authority, and Virginia Biotechnology Research Partnership Authority of $18.7 million, $576,000, $205,649, $90,383, and $52,055, respectively. This debt is not supported by taxes.
13. This includes OPEB obligations that do not relate to the Department of Human Resource Management from the University of Virginia of $58.3 million and Virginia Port Authority of $910,998. This debt is not supported by taxes.
14. This includes $7.5 million that is supported by taxes.
15. These generally represent split-interest agreements that represent donor contributed assets with the requirement that an annual distribution be made to the donor or specified beneficiary. The annual distributions are usually for a fixed dollar amount or a fixed percentage of the trust's fair market value. The present value of these commitments is reported as Trust and Annuity Obligations.
Primary Government

Transportation Facilities Debt

Transportation Facilities Bonds include $6.1 million of Section 9(c) general obligation bonds and $4.1 billion of Transportation Facilities Section 9(d) debt. The Section 9(d) debt includes $2.9 billion of Section 9(d) revenue bonds and $1.2 billion of Grant Anticipation Revenue Notes (GARVEES) in addition to the outstanding Section 9(d) revenue bonds. Section 9(c) principal and interest requirements for the current year totaled $3.0 million. Section 9(d) principal and interest requirements for the current year totaled $376.0 million. The Section 9(c) Transportation Facilities Bonds were issued to fund the construction and improvement of the George P. Coleman Bridge. The Section 9(d) Transportation Facilities Bonds were issued to fund the construction of State Route 28, U.S. Route 58, the Northern Virginia Transportation District Program, the Oak Grove Connector (Chesapeake), and costs of certain transportation projects in the Commonwealth. The GARVEES were issued to finance various Federal Aid Transportation projects throughout the Commonwealth. The interest rates for these bonds range from 1.0 percent to 5.4 percent and the issuance dates range from October 10, 2002 to May 16, 2019.

On December 5, 2018, the Commonwealth Transportation Board issued $75.8 million of Commonwealth of Virginia Federal Transportation Grant Anticipation Revenue Notes, Series 2018. Series 2018 will be maturing in semi-annual installments on March 15 and September 15 in the years 2019 to 2033 and interest is payable on March 15 and September 15 at rates varying from 4.0 to 5.0 percent. The net proceeds of the Series 2018 bonds will be used to pay for the costs of certain transportation projects in the Commonwealth and certain costs related to the issuance of the 2018 bonds.

On April 23, 2019, the Commonwealth Transportation Board issued $236.0 million of Commonwealth of Virginia Transportation Capital Projects Revenue Bonds, Series 2019. Series 2019 Refunding Revenue Bonds will be maturing in annual installments on May 15 in the years 2020 to 2043 and interest is payable semi-annually on May 15 and November 15 at rates varying from 4.0 to 5.0 percent. The net proceeds of the Series 2019 bonds will be used to pay for the costs of certain transportation projects in the Commonwealth and certain costs related to the issuance of the 2019 bonds.

On May 16, 2019, the Commonwealth Transportation Board issued $43.4 million of Commonwealth of Virginia Transportation Revenue Refunding Bonds, Series 2019A. Series 2019A Refunding Revenue Bonds will be maturing in annual installments on May 15 in the years 2020 to 2034 and interest is payable on May 15 and November 15 at rates varying from 3.0 to 5.0 percent. The 2019A Series bonds were issued to advance refund the outstanding Series 2009A-2 bonds.

The following schedules detail the annual funding requirements necessary to amortize Transportation Facilities 9(c) bonds and 9(d) debt. Pursuant to the American Recovery and Reinvestment Act, the Commonwealth expects to receive an interest subsidy to reimburse interest payments of $61.1 million for Build America Bonds (BABs) issued. The BABs are applicable to Commonwealth of Virginia Transportation Series 2010A Capital Project Revenue Bonds. Additionally, the Commonwealth will receive the amounts required to pay the debt service on outstanding Series 2002 and Series 2012 bonds from the Route 28 Transportation Improvement District, annually. The Commonwealth will also receive a portion of the debt service amount for Oak Grove and the Northern Virginia Transportation District from the localities where the projects are located, annually.

Fairfax Economic Development Authority Obligations

In fiscal year 2006, the Fairfax County Economic Development Authority (EDA) issued Section 9(d) revenue bonds to pay for the Commonwealth’s (VDOT) costs of the planning, design and construction of a transportation infrastructure and related public safety operations complex to be developed on the contiguous sites in the county commonly referred to as "Camp 30" for the joint use of VDOT and the county. In fiscal year 2014, Fairfax County EDA issued a series of revenue refunding bonds, which refunded Series 2006 revenue bonds. The Commonwealth’s obligation is set out in a payment agreement between Fairfax County EDA and the Commonwealth of Virginia, Department of Transportation, in which the Commonwealth agrees to make payments equal to the debt service from amounts appropriated by the General Assembly. The interest rates for these bonds range from 1.0 percent to 5.0 percent and the issue date was March 26, 2014. The principal and interest

Commonwealth of Virginia 171
requirements for the current year totaled $7.8 million. The following schedule details the annual funding requirements necessary to repay these bonds.

<table>
<thead>
<tr>
<th>Maturity</th>
<th>Principal</th>
<th>Interest</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>$6,795,000</td>
<td>$1,032,250</td>
<td>$7,827,250</td>
</tr>
<tr>
<td>2021</td>
<td>7,135,000</td>
<td>692,500</td>
<td>7,827,500</td>
</tr>
<tr>
<td>2022</td>
<td>6,715,000</td>
<td>335,750</td>
<td>7,050,750</td>
</tr>
<tr>
<td>Add:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unamortized Premium</td>
<td>2,721,356</td>
<td>2,721,356</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$23,366,356</td>
<td>$2,060,500</td>
<td>$25,426,856</td>
</tr>
</tbody>
</table>

Public Facilities Bonds


Parking Facilities Bonds

Section 9(c) general obligation bonds consist of Parking Facilities Bonds, Series 2009D Refunding, 2012A Refunding, and Series 2016B Refunding. The Series 2009D Refunding bonds were issued to advance refund outstanding Series 2004A bonds. The Series 2012A Refunding bonds were issued to advance refund outstanding Series 2002 Refunding and Series 2004A bonds. The Series 2016B Refunding bonds were issued to advance refund certain maturities of outstanding Series 2009B bonds. The interest rate for these bonds range from 2.0 percent to 5.0 percent, and the issuance dates range from October 21, 2009, to November 10, 2016. The following schedule details the annual funding requirements necessary to repay these bonds.

Virginia Public Building Authority


<table>
<thead>
<tr>
<th>Maturity</th>
<th>Principal</th>
<th>Interest</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>$785,000</td>
<td>$343,310</td>
<td>$1,128,310</td>
</tr>
<tr>
<td>2021</td>
<td>825,000</td>
<td>304,060</td>
<td>1,129,060</td>
</tr>
<tr>
<td>2022</td>
<td>865,000</td>
<td>262,810</td>
<td>1,127,810</td>
</tr>
<tr>
<td>2023</td>
<td>906,257</td>
<td>233,652</td>
<td>1,129,909</td>
</tr>
<tr>
<td>2024</td>
<td>952,789</td>
<td>178,339</td>
<td>1,131,128</td>
</tr>
<tr>
<td>2025-2029</td>
<td>3,145,000</td>
<td>371,550</td>
<td>3,516,550</td>
</tr>
</tbody>
</table>

Add:

| Unamortized Premium | 1,088,157 |

Total $8,567,203 $1,683,721 $10,250,924
percent to 5.9 percent and the issuance dates range from December 7, 2005, to April 2, 2019. The Series 2005D bonds are demand bonds with variable rates which are reset weekly by the remarketing agent. The 2005D bonds are subject to optional redemption. The principal balance outstanding on June 30, 2019 of $50.0 million is scheduled to be paid based on mandatory sinking fund requirements and included in the following schedule. Additional information on these demand bonds may be obtained from the audited financial statements on the Department of the Treasury website at www.trs.virginia.gov.

Current year principal and interest requirements for all VPBA bonds totaled $260.0 million. The following schedule details the annual funding requirements necessary to repay these bonds. Pursuant to the American Recovery and Reinvestment Act, the Commonwealth expects to receive an interest subsidy to reimburse interest payments of $49.2 million for Build America Bonds (BABs) issued. The BABs are applicable to Series 2010 Revenue Bonds.

### Component Units

#### Higher Education Institution Bonds

Higher Education Institution Bonds are comprised of both 9(c) general obligation bonds and 9(d) revenue bonds. Section 9(d) bonds are from several sources as shown on the following schedule (dollars in thousands).

- College and university bonds backed by pledge of general revenue or revenue from specific revenue-producing capital projects: $2,241,523
- College and university debt backed exclusively by pledged revenues of an institution: $177,1 million

The following schedules detail the annual funding requirements necessary to amortize Higher Education Institution 9(c) and 9(d) bonds. Pursuant to the American Recovery and Reinvestment Act, the Commonwealth expects to receive an interest subsidy to reimburse interest payments of $249.1 million for Build America Bonds (BABs) issued. The BABs are applicable to General Obligation Series 2010A Bonds, Series 2009F and 2010B 21st Century Virginia College Building Authority Education Facilities Bonds, and the University of Virginia’s Series 2009 and 2010 General Revenue Bonds. The schedules include $177.1 million for Virginia Commonwealth University Health System Authority (blended component unit of Virginia Commonwealth University – nonmajor) Series 2013A and 2013B bonds are variable rate bonds and the rates are reset weekly by the remarketing agent.

The following schedules detail the annual funding requirements necessary to amortize Higher Education Institution 9(c) and 9(d) bonds. Pursuant to the American Recovery and Reinvestment Act, the Commonwealth expects to receive an interest subsidy to reimburse interest payments of $249.1 million for Build America Bonds (BABs) issued. The BABs are applicable to General Obligation Series 2010A Bonds, Series 2009F and 2010B 21st Century Virginia College Building Authority Education Facilities Bonds, and the University of Virginia’s Series 2009 and 2010 General Revenue Bonds. The schedules include $177.1 million for Virginia Commonwealth University Health System Authority (blended component unit of Virginia Commonwealth University - nonmajor component unit) Direct Placement Bond Series and these bonds include event of default provisions that could change the timing of repayment of the outstanding amounts to become immediately due.

### Hampton Roads Transportation Accountability Commission

Hampton Roads Transportation Accountability Commission Section bonds consists of Senior Lien Revenue Bonds, Series 2018A. The bonds were issued to pay for the costs of planning, design, and construction of transportation infrastructure in the localities comprising Planning District 23. The interest rates for this bond series ranges from 5.0 percent to 5.5 percent and the issue date was February 14, 2018. Current year interest requirements totaled $25.9 million. The following schedule details the annual funding requirements necessary to repay these bonds.

<table>
<thead>
<tr>
<th>Maturity</th>
<th>Principal</th>
<th>Interest</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>$164,670,000</td>
<td>$110,700,169</td>
<td>$275,370,169</td>
</tr>
<tr>
<td>2021</td>
<td>$173,205,000</td>
<td>$105,287,590</td>
<td>$278,492,590</td>
</tr>
<tr>
<td>2022</td>
<td>$172,240,000</td>
<td>$97,122,538</td>
<td>$269,362,538</td>
</tr>
<tr>
<td>2023</td>
<td>$176,820,000</td>
<td>$88,477,711</td>
<td>$265,297,711</td>
</tr>
<tr>
<td>2024</td>
<td>$182,555,000</td>
<td>$80,964,771</td>
<td>$263,526,771</td>
</tr>
<tr>
<td>2025-2029</td>
<td>$200,260,000</td>
<td>$105,312,590</td>
<td>$305,572,590</td>
</tr>
<tr>
<td>2030-2034</td>
<td>$218,235,000</td>
<td>$112,312,625</td>
<td>$330,547,625</td>
</tr>
<tr>
<td>2035-2039</td>
<td>$236,210,000</td>
<td>$119,400,060</td>
<td>$355,610,060</td>
</tr>
<tr>
<td>Add: Unamortized Premium</td>
<td>$265,850,476</td>
<td>$265,850,476</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$1,335,678,238</td>
<td>$758,960,875</td>
<td>$2,094,639,113</td>
</tr>
</tbody>
</table>

The interest rates for these bonds range from 1.3 percent to 6.2 percent and the issuance dates range from April 15, 2009, to June 5, 2019. The Virginia Commonwealth University Series 2012A and 2012B bonds and the Virginia Commonwealth University Health System Authority (a blended component unit of the Virginia Commonwealth University – nonmajor) Series 2013A and 2013B bonds are variable rate bonds and the rates are reset weekly by the remarketing agent.
Various higher education institutions’ foundations (component units) and a museum foundation (component unit) have bonds outstanding as of year-end. The purpose of a majority of these bonds is for construction, property acquisition, and defeasance of prior debt. The following schedule details the future principal payments.

### Foundations’ Bonds (1)

#### Debt Service Requirements to Maturity

<table>
<thead>
<tr>
<th>Maturity</th>
<th>Principal</th>
<th>Interest</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>$141,655,117</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>44,182,363</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>34,280,273</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td>34,154,238</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2024</td>
<td>39,538,830</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thereafter</td>
<td>788,538,363</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$1,082,349,164</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note (1):** Foundations represent FASB reporting entities defined in Note 1.B.

### Virginia Port Authority

The Virginia Port Authority (nonmajor) has issued Section 9(d) revenue bonds and notes pursuant to powers provided to its Board of Commissioners by the *Code of Virginia*. The interest rates for these bonds range from 1.6 percent to 5.0 percent, and the issuance dates range from January 25, 2012, to July 16, 2018. The following schedule details the annual funding requirements necessary to amortize these bonds.

#### Debt Service Requirements to Maturity

<table>
<thead>
<tr>
<th>Maturity</th>
<th>Principal</th>
<th>Interest</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>$15,830,000</td>
<td>$20,266,105</td>
<td>$36,096,105</td>
</tr>
<tr>
<td>2021</td>
<td>16,065,000</td>
<td>19,821,606</td>
<td>35,886,606</td>
</tr>
<tr>
<td>2022</td>
<td>16,535,000</td>
<td>19,336,890</td>
<td>35,871,890</td>
</tr>
<tr>
<td>2023</td>
<td>17,040,000</td>
<td>18,813,511</td>
<td>35,853,511</td>
</tr>
<tr>
<td>2024</td>
<td>17,575,000</td>
<td>18,250,967</td>
<td>35,825,967</td>
</tr>
<tr>
<td>2025-2029</td>
<td>99,130,000</td>
<td>81,328,948</td>
<td>180,458,948</td>
</tr>
<tr>
<td>2030-2034</td>
<td>102,210,000</td>
<td>60,216,997</td>
<td>162,426,997</td>
</tr>
<tr>
<td>2035-2039</td>
<td>96,900,000</td>
<td>39,484,756</td>
<td>136,384,756</td>
</tr>
<tr>
<td>2040-2044</td>
<td>86,680,000</td>
<td>16,984,671</td>
<td>103,664,671</td>
</tr>
<tr>
<td>2045-2049</td>
<td>32,755,000</td>
<td>1,550,049</td>
<td>34,305,049</td>
</tr>
<tr>
<td>Add:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unamortized Premium</td>
<td>19,175,518</td>
<td></td>
<td>19,175,518</td>
</tr>
<tr>
<td>Total</td>
<td>$519,895,518</td>
<td>$296,054,500</td>
<td>$815,950,018</td>
</tr>
</tbody>
</table>

### Virginia Housing Development Authority

The Virginia Housing Development Authority (major) issued Section 9(d) revenue bonds. The interest rates for these bonds range from 2.1 percent to 6.8 percent and the issuance dates range from December 17, 2002, to May 22, 2019. The following schedule details the annual funding requirements necessary to amortize these bonds. The schedule includes $244.1 million for rental housing bonds group Direct Placement Bonds. VHDA has an option to redeem various bonds pursuant the terms of each bond issue. The redemptions generally cannot be exercised without condition until the bonds have been outstanding for nine years or more.
Bonds.

VPSA's 2014-1 QZAB Bond Series shall bear interest at (QZAB) Series 2014-1 and 2016 Direct Placement Bonds. Includes $6.2 million for Qualified Zone Academy Bonds 2011-2, and 2012-1 Revenue Bonds. The schedule The QSCBs are applicable to Series 2010-1, 2011-1, 2011-2, and 2012-1 Revenue Bonds. The interest rates for these bonds range from 0.0 percent to 5.5 percent, and the issuance dates range from July 31, 2002, to November 13, 2018.

Virginia Resources Authority

The Virginia Resources Authority (major) issued Section 9(d) revenue bonds. The interest rates for these bonds range from 0.2 percent to 6.3 percent and the issuance dates range from December 11, 2003, to May 21, 2019. The following schedule details the annual funding requirements necessary to amortize these bonds.

### 9(d) VIRGINIA HOUSING DEVELOPMENT AUTHORITY BONDS

<table>
<thead>
<tr>
<th>Maturity</th>
<th>Principal</th>
<th>Interest</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>185,206,532</td>
<td>137,949,579</td>
<td>323,156,111</td>
</tr>
<tr>
<td>2021</td>
<td>192,033,620</td>
<td>129,474,165</td>
<td>321,507,785</td>
</tr>
<tr>
<td>2022</td>
<td>188,142,050</td>
<td>120,643,938</td>
<td>308,785,988</td>
</tr>
<tr>
<td>2023</td>
<td>176,069,097</td>
<td>102,894,165</td>
<td>280,963,262</td>
</tr>
<tr>
<td>2024</td>
<td>926,248,572</td>
<td>384,879,222</td>
<td>1,311,127,794</td>
</tr>
<tr>
<td>2025-2029</td>
<td>690,676,608</td>
<td>202,129,646</td>
<td>892,806,254</td>
</tr>
<tr>
<td>2030-2034</td>
<td>427,285,893</td>
<td>91,331,404</td>
<td>518,617,297</td>
</tr>
<tr>
<td>2040-2044</td>
<td>207,185,000</td>
<td>26,301,100</td>
<td>233,486,100</td>
</tr>
<tr>
<td>2045-2049</td>
<td>46,010,000</td>
<td>3,131,995</td>
<td>49,141,995</td>
</tr>
<tr>
<td>Less: Unamortized</td>
<td>4,677,290</td>
<td>56,127,290</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3,479,670,492</td>
<td>1,310,424,336</td>
<td>4,845,696,841</td>
</tr>
</tbody>
</table>

Virginia Public School Authority

The Virginia Public School Authority (major) issued Section 9(d) revenue bonds. The interest rates for these bonds range from 0.0 percent to 5.5 percent, and the issuance dates range from December 11, 2003, to May 21, 2019. The following schedule details the annual funding requirements necessary to amortize these bonds. Pursuant to the American Recovery and Reinvestment Act, the Commonwealth expects to receive an interest subsidy to reimburse interest payments of $132.0 million for Qualified School Construction Bonds (QSCBs) issued. The QSCBs are applicable to Series 2010-1, 2011-1, 2011-2, and 2012-1 Revenue Bonds. The schedule includes $6.2 million for Qualified Zone Academy Bonds (QZAB) Series 2014-1 and 2016 Direct Placement Bonds. VPSA's 2014-1 QZAB Bond Series shall bear interest at the default rate, payable on demand by the owner of the Bonds.

### 9(d) VIRGINIA PUBLIC SCHOOL AUTHORITY BONDS

<table>
<thead>
<tr>
<th>Maturity</th>
<th>Principal</th>
<th>Interest</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>251,750,000</td>
<td>135,872,627</td>
<td>387,622,627</td>
</tr>
<tr>
<td>2021</td>
<td>243,230,000</td>
<td>126,519,042</td>
<td>369,749,042</td>
</tr>
<tr>
<td>2022</td>
<td>236,905,000</td>
<td>115,038,664</td>
<td>351,943,664</td>
</tr>
<tr>
<td>2023</td>
<td>225,285,000</td>
<td>103,779,669</td>
<td>329,064,669</td>
</tr>
<tr>
<td>2024</td>
<td>217,570,000</td>
<td>93,025,921</td>
<td>310,595,921</td>
</tr>
<tr>
<td>2025-2029</td>
<td>706,930,000</td>
<td>113,544,156</td>
<td>820,444,156</td>
</tr>
<tr>
<td>2030-2034</td>
<td>288,230,000</td>
<td>29,026,988</td>
<td>317,256,988</td>
</tr>
<tr>
<td>2035-2039</td>
<td>43,450,000</td>
<td>6,455,522</td>
<td>49,905,522</td>
</tr>
<tr>
<td>2040-2044</td>
<td>21,215,000</td>
<td>1,960,063</td>
<td>23,175,063</td>
</tr>
<tr>
<td>2045-2049</td>
<td>3,150,000</td>
<td>37,619</td>
<td>3,187,619</td>
</tr>
<tr>
<td>Total</td>
<td>3,554,603,244</td>
<td>1,034,189,246</td>
<td>4,588,792,490</td>
</tr>
</tbody>
</table>

Hampton Roads Sanitation District Commission

The Hampton Roads Sanitation District Commission (nonmajor) issued bonds under a Master Trust Indenture and a Trust Agreement dated December 1, 1993 and March 1, 2008. The interest cost for these bonds range from 1.5 percent to 5.1 percent. The following schedule details the annual funding requirements necessary to amortize these bonds. The fiscal year 2020 principal amount includes $50.0 million for demand bonds, which are also classified as “due within one year” in the accompanying financial statements.

### HAMPTON ROADS SANITATION DISTRICT COMMISSION

<table>
<thead>
<tr>
<th>Maturity</th>
<th>Principal</th>
<th>Interest</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>84,951,000</td>
<td>33,785,000</td>
<td>118,736,000</td>
</tr>
<tr>
<td>2021</td>
<td>29,190,000</td>
<td>33,082,000</td>
<td>62,272,000</td>
</tr>
<tr>
<td>2022</td>
<td>31,076,000</td>
<td>32,633,000</td>
<td>63,709,000</td>
</tr>
<tr>
<td>2023</td>
<td>33,080,000</td>
<td>31,193,000</td>
<td>64,273,000</td>
</tr>
<tr>
<td>2024</td>
<td>34,126,000</td>
<td>29,854,000</td>
<td>63,980,000</td>
</tr>
<tr>
<td>2025-2029</td>
<td>182,089,000</td>
<td>126,466,000</td>
<td>308,555,000</td>
</tr>
<tr>
<td>2030-2034</td>
<td>190,664,000</td>
<td>85,189,000</td>
<td>275,853,000</td>
</tr>
<tr>
<td>2035-2039</td>
<td>160,453,000</td>
<td>42,064,000</td>
<td>202,517,000</td>
</tr>
<tr>
<td>2040-2044</td>
<td>71,162,000</td>
<td>13,792,000</td>
<td>84,954,000</td>
</tr>
<tr>
<td>2045-2049</td>
<td>14,941,000</td>
<td>1,948,000</td>
<td>16,889,000</td>
</tr>
<tr>
<td>Add: Unamortized Premium</td>
<td>59,897,000</td>
<td>59,897,000</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>891,629,000</td>
<td>430,008,000</td>
<td>1,321,637,000</td>
</tr>
</tbody>
</table>

Virginia Biotechnology Research Partnership Authority

The Virginia Biotechnology Research Partnership Authority (nonmajor) consists of Series 2009 Commonwealth of Virginia Lease Revenue bonds. Coupon interest rates range from 3.0 percent to 5.0 percent.

### VIRGINIA BIOTECHNOLOGY RESEARCH PARTNERSHIP AUTHORITY

<table>
<thead>
<tr>
<th>Maturity</th>
<th>Principal</th>
<th>Interest</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>4,200,000</td>
<td>557,750</td>
<td>4,757,750</td>
</tr>
<tr>
<td>2021</td>
<td>4,415,000</td>
<td>342,375</td>
<td>4,757,375</td>
</tr>
<tr>
<td>2022</td>
<td>4,640,000</td>
<td>116,000</td>
<td>4,756,000</td>
</tr>
<tr>
<td>Add: Unamortized Premium</td>
<td>965,019</td>
<td>965,019</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>14,220,019</td>
<td>1,016,125</td>
<td>15,236,144</td>
</tr>
</tbody>
</table>

Total principal outstanding as of June 30, 2019, on all component unit bonds amounted to $20.9 billion.
The following schedule summarizes the changes in long-term liabilities:

(Dollars in Thousands)

<table>
<thead>
<tr>
<th></th>
<th>Balance July 1, as restated (3)</th>
<th>Issuances and Other Increases</th>
<th>Retirements and Other Decreases</th>
<th>Subtotal June 30</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Government</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Governmental Activities:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term Debt Bearing the Pledge of the Full Faith and Credit of the Commonwealth:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Obligation Bonds - 9(b) and 9(c):</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Facilities Bonds</td>
<td>$403,860</td>
<td>$—</td>
<td>$(48,090)</td>
<td>$355,770</td>
</tr>
<tr>
<td>Parking Facilities Bonds</td>
<td>8,464</td>
<td>—</td>
<td>$(985)</td>
<td>7,479</td>
</tr>
<tr>
<td>Transportation Facilities Bonds</td>
<td>8,060</td>
<td>—</td>
<td>$(2,560)</td>
<td>5,500</td>
</tr>
<tr>
<td>Add: Unamortized Premium</td>
<td>56,144</td>
<td>—</td>
<td>$(8,392)</td>
<td>47,752</td>
</tr>
<tr>
<td>Total General Obligation Bonds</td>
<td>476,528</td>
<td>—</td>
<td>$(60,027)</td>
<td>416,501</td>
</tr>
<tr>
<td>Long-term Debt/Obligations Not Bearing the Pledge of the Full Faith and Credit of the Commonwealth:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation Facilities Bonds</td>
<td>3,551,290</td>
<td>355,075</td>
<td>(257,191)</td>
<td>3,649,174</td>
</tr>
<tr>
<td>Virginia Public Building Authority Bonds</td>
<td>2,418,000</td>
<td>336,950</td>
<td>(157,140)</td>
<td>2,597,810</td>
</tr>
<tr>
<td>Hampton Roads Transportation Accountability Commission</td>
<td>500,000</td>
<td>—</td>
<td>—</td>
<td>500,000</td>
</tr>
<tr>
<td>Economic Development Authority Obligations</td>
<td>27,115</td>
<td>—</td>
<td>$(6,470)</td>
<td>20,645</td>
</tr>
<tr>
<td>Add: Unamortized Premium</td>
<td>778,419</td>
<td>82,766</td>
<td>(72,473)</td>
<td>788,712</td>
</tr>
<tr>
<td>Accretion on Capital Appreciation Bonds</td>
<td>31,002</td>
<td>2,791</td>
<td>$(4,290)</td>
<td>29,503</td>
</tr>
<tr>
<td>Less: Unamortized Discount</td>
<td>(81)</td>
<td>5</td>
<td>$(76)</td>
<td></td>
</tr>
<tr>
<td>Installment Purchase Obligations from Direct Borrowings</td>
<td>103,655</td>
<td>26,085</td>
<td>(14,809)</td>
<td>114,931</td>
</tr>
<tr>
<td>Compensated Absences</td>
<td>307,329</td>
<td>201,691</td>
<td>(191,480)</td>
<td>317,540</td>
</tr>
<tr>
<td>Capital Lease Obligations</td>
<td>36,742</td>
<td>765</td>
<td>$(6,625)</td>
<td>30,882</td>
</tr>
<tr>
<td>Net Pension Liability*</td>
<td>4,082,682</td>
<td>—</td>
<td>$(282,792)</td>
<td>3,799,890</td>
</tr>
<tr>
<td>Net OPEB Liability*</td>
<td>775,186</td>
<td>26,826</td>
<td>—</td>
<td>802,012</td>
</tr>
<tr>
<td>Total OPEB Liability*</td>
<td>735,108</td>
<td>—</td>
<td>$(169,660)</td>
<td>565,448</td>
</tr>
<tr>
<td>Pollution Remediation Obligations</td>
<td>6,963</td>
<td>3,971</td>
<td>$(504)</td>
<td>10,430</td>
</tr>
<tr>
<td>Other</td>
<td>30,948</td>
<td>—</td>
<td>$(626)</td>
<td>30,322</td>
</tr>
<tr>
<td>Total Long-term Debt/Obligations Not Bearing the Pledge of the Full Faith and Credit of the Commonwealth</td>
<td>13,384,358</td>
<td>1,036,925</td>
<td>(1,164,060)</td>
<td>13,257,223</td>
</tr>
<tr>
<td>Total Governmental Activities</td>
<td>13,860,886</td>
<td>1,036,925</td>
<td>(1,224,087)</td>
<td>13,673,724</td>
</tr>
<tr>
<td><strong>Business-type Activities:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term Debt/Obligations Not Bearing the Pledge of the Full Faith and Credit of the Commonwealth:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compensated Absences</td>
<td>10,546</td>
<td>3,577</td>
<td>(3,053)</td>
<td>11,070</td>
</tr>
<tr>
<td>Net Pension Liability*</td>
<td>135,629</td>
<td>—</td>
<td>$(7,624)</td>
<td>128,005</td>
</tr>
<tr>
<td>Net OPEB Liability*</td>
<td>21,680</td>
<td>619</td>
<td>—</td>
<td>22,299</td>
</tr>
<tr>
<td>Total OPEB Liability*</td>
<td>25,434</td>
<td>—</td>
<td>$(5,392)</td>
<td>20,042</td>
</tr>
<tr>
<td>Installment Purchase Obligations from Direct Borrowings</td>
<td>—</td>
<td>570</td>
<td>$(52)</td>
<td>518</td>
</tr>
<tr>
<td>Lottery Prizes Payable</td>
<td>116,484</td>
<td>2,144</td>
<td>$(5,645)</td>
<td>112,983</td>
</tr>
<tr>
<td>Tuition Benefits Payable</td>
<td>2,135,222</td>
<td>32,089</td>
<td>(175,842)</td>
<td>1,991,469</td>
</tr>
<tr>
<td>Total Business-type Activities</td>
<td>2,444,995</td>
<td>38,999</td>
<td>(197,608)</td>
<td>2,286,386</td>
</tr>
<tr>
<td>Total Primary Government</td>
<td>$16,305,881</td>
<td>$1,075,924</td>
<td>$(1,421,695)</td>
<td>$15,960,110</td>
</tr>
</tbody>
</table>

*Net increase/decrease is shown.
<table>
<thead>
<tr>
<th>Foundations (4)</th>
<th>Balance June 30</th>
<th>Due Within One Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>—</td>
<td>355,770</td>
<td>48,140</td>
</tr>
<tr>
<td>—</td>
<td>7,479</td>
<td>785</td>
</tr>
<tr>
<td>—</td>
<td>5,500</td>
<td>2,685</td>
</tr>
<tr>
<td>—</td>
<td>47,752</td>
<td>—</td>
</tr>
<tr>
<td>—</td>
<td>416,501</td>
<td>51,610</td>
</tr>
<tr>
<td>—</td>
<td>3,649,174</td>
<td>199,728</td>
</tr>
<tr>
<td>—</td>
<td>2,597,810</td>
<td>164,670</td>
</tr>
<tr>
<td>—</td>
<td>500,000</td>
<td>—</td>
</tr>
<tr>
<td>—</td>
<td>20,645</td>
<td>6,795</td>
</tr>
<tr>
<td>—</td>
<td>788,712</td>
<td>—</td>
</tr>
<tr>
<td>—</td>
<td>29,503</td>
<td>—</td>
</tr>
<tr>
<td>—</td>
<td>(76)</td>
<td>—</td>
</tr>
<tr>
<td>—</td>
<td>114,931</td>
<td>15,125</td>
</tr>
<tr>
<td>—</td>
<td>317,540</td>
<td>196,445</td>
</tr>
<tr>
<td>—</td>
<td>30,882</td>
<td>6,140</td>
</tr>
<tr>
<td>—</td>
<td>3,799,890</td>
<td>—</td>
</tr>
<tr>
<td>—</td>
<td>802,012</td>
<td>6,177</td>
</tr>
<tr>
<td>—</td>
<td>565,448</td>
<td>23,248</td>
</tr>
<tr>
<td>—</td>
<td>10,430</td>
<td>1,879</td>
</tr>
<tr>
<td>—</td>
<td>30,322</td>
<td>6,456</td>
</tr>
<tr>
<td>—</td>
<td>13,257,223</td>
<td>626,663</td>
</tr>
<tr>
<td>—</td>
<td>13,673,724</td>
<td>678,273</td>
</tr>
<tr>
<td>—</td>
<td>11,070</td>
<td>8,427</td>
</tr>
<tr>
<td>—</td>
<td>128,005</td>
<td>—</td>
</tr>
<tr>
<td>—</td>
<td>22,299</td>
<td>63</td>
</tr>
<tr>
<td>—</td>
<td>20,042</td>
<td>825</td>
</tr>
<tr>
<td>—</td>
<td>518</td>
<td>109</td>
</tr>
<tr>
<td>—</td>
<td>112,983</td>
<td>10,691</td>
</tr>
<tr>
<td>—</td>
<td>1,991,469</td>
<td>283,077</td>
</tr>
<tr>
<td>—</td>
<td>2,286,386</td>
<td>303,192</td>
</tr>
<tr>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>—</td>
<td>15,960,110</td>
<td>981,465</td>
</tr>
</tbody>
</table>

Continued on next page
## Schedule of Changes in Long-term Debt and Obligations (1) (2)

<table>
<thead>
<tr>
<th>Component Units</th>
<th>Balance July 1, as restated (3)</th>
<th>Issuances and Other Increases</th>
<th>Retirements and Other Decreases</th>
<th>Subtotal June 30</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Long-term Debt Bearing the Pledge of the Full Faith and Credit of the Commonwealth:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Obligation Bonds - Higher Education 9(c)</td>
<td>$836,874</td>
<td>$118,210</td>
<td>$(61,978)</td>
<td>$893,106</td>
</tr>
<tr>
<td><strong>Long-term Debt/Obligations Not Bearing the Pledge of the Full Faith and Credit of the Commonwealth:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bonds (5)</td>
<td>18,620,642</td>
<td>1,613,549</td>
<td>(1,748,016)</td>
<td>18,486,175</td>
</tr>
<tr>
<td>Bonds from Direct Placements (5)</td>
<td>436,796</td>
<td>—</td>
<td>(9,465)</td>
<td>427,331</td>
</tr>
<tr>
<td>Installment Purchase Obligations from Direct Borrowings</td>
<td>63,050</td>
<td>3,333</td>
<td>(11,124)</td>
<td>55,259</td>
</tr>
<tr>
<td>Capital Lease Obligations</td>
<td>2,295,765</td>
<td>20,902</td>
<td>(3,668)</td>
<td>2,312,999</td>
</tr>
<tr>
<td>Notes Payable</td>
<td>1,927,700</td>
<td>283,322</td>
<td>(199,040)</td>
<td>2,011,982</td>
</tr>
<tr>
<td>Notes Payable from Direct Borrowings</td>
<td>106,856</td>
<td>75,000</td>
<td>(3,950)</td>
<td>177,906</td>
</tr>
<tr>
<td>Compensated Absences</td>
<td>323,953</td>
<td>358,662</td>
<td>(333,369)</td>
<td>349,246</td>
</tr>
<tr>
<td>Net Pension Liability*</td>
<td>2,688,728</td>
<td>—</td>
<td>(197,864)</td>
<td>2,490,864</td>
</tr>
<tr>
<td>Net OPEB Liability*</td>
<td>783,799</td>
<td>15,231</td>
<td>—</td>
<td>799,030</td>
</tr>
<tr>
<td>Total OPEB Liability*</td>
<td>639,434</td>
<td>—</td>
<td>(160,050)</td>
<td>479,384</td>
</tr>
<tr>
<td>Trust and Annuity Obligations</td>
<td>62,979</td>
<td>2,674</td>
<td>(537)</td>
<td>65,116</td>
</tr>
<tr>
<td>Other</td>
<td>271,495</td>
<td>68,206</td>
<td>(67,329)</td>
<td>272,372</td>
</tr>
<tr>
<td><strong>Total Component Units</strong></td>
<td>$29,058,071</td>
<td>$2,559,089</td>
<td>$(2,796,390)</td>
<td>$28,820,770</td>
</tr>
</tbody>
</table>

*Net increase/decrease is shown.

Note (1) Pursuant to GASB Statement No. 34, governmental activities include internal service funds. Business-type activities are considered enterprise funds.

Note (2) Payments on bonded debt that pertain to the Commonwealth's governmental activities are made through the debt service funds. Payments for installment purchases, compensated absences, capital leases, pension, and other obligations that pertain to the Commonwealth's governmental activities are made through the general and all special revenue funds, excluding the Literary Fund (major). Internal service funds predominantly serve the governmental funds. Accordingly, long-term liabilities for these funds are included as part of the total for governmental activities. Enterprise funds, or business-type activities, are self-supporting funds. Accordingly, long-term liabilities are paid from each respective fund.

Note (3) Component Unit Bonds and Notes Payable have been restated by $84,036 (dollars in thousands) for a reclassification for the Virginia Resources Authority (major). Other Liabilities has been restated by $33,652 (dollars in thousands) to reclassify escrow funds held by the Virginia Housing Development Authority (major) from long-term liabilities to other liabilities. Other Liabilities and Notes Payable have been restated by $2,158 (dollars in thousands) for a reclassification from Other Liabilities to Notes Payable for a nonmajor component unit.

Note (4) Foundations represent FASB reporting entities defined in Note 1.B.

Note (5) Amounts are net of any unamortized discounts and premiums.
Transportation District debt defeasance resulted in an accounting loss of $801,800. Total debt service payments over the next 10 years will be reduced by $15.5 million. Present value savings of $13.8 million reflect the True Interest Cost of each component of the refunding at the discount rate.

In October 2018, Virginia Commonwealth University (nonmajor) issued $50.7 million of Series 2018A to refund the Series 2012A and Series 2012B General Revenue Pledge Refunding Bonds, and the University’s taxable note related to its line of credit. For information regarding this refunding, see the University’s separately issued financial statements.

**Arbitrage Rebate**

The Tax Reform Act of 1986 requires that governmental entities issuing tax-exempt debt calculate and rebate arbitrage earnings to the Federal government. The U.S. Treasury has issued regulations on calculating the rebate amount and complying with the provisions of the Tax Reform Act of 1986. Governmental issuers must comply with the rebate regulations in order for their bonds to maintain tax-exempt status. The regulations require earnings on investments purchased with bond proceeds in excess of the amount that would have been earned if the proceeds were invested at a rate equal to the bond yield, be subject to rebate to the Federal government.

In May 2019, the Commonwealth Transportation Board of the Commonwealth of Virginia issued $43.4 million in Commonwealth of Virginia Transportation Revenue Refunding Bonds Series 2019A with an interest rate ranging from 3.0 to 5.0 percent to advance refund the outstanding Commonwealth of Virginia Transportation Revenue Bonds Series 2009A-2 (Northern Virginia Transportation District Program - Taxable - Build America Bonds). The net proceeds from the sale of the Refunding Bonds and unspent funds of $49.5 million (after payment of underwriter’s fees and other issuance costs) were deposited to an irrevocable trust with an escrow agent to provide for all future debt service on the defeased bonds. This debt defeasance resulted in an economic gain of $5.1 million, discounted at the rate of 2.2 percent.

## Component Units

For fiscal year 2019, the Virginia Public School Authority (VPSA) (major) issued $169.7 million of Series 2019B refunding bonds. The net proceeds have been placed with an escrow agent to provide for all future debt service on the defeased bonds. This debt defeasance resulted in an accounting loss of $801,800. Total debt service payments over the next 10 years will be reduced by $15.5 million. Present value savings of $13.8 million reflect the True Interest Cost of each component of the refunding at the discount rate.

<table>
<thead>
<tr>
<th>Foundations (4)</th>
<th>Balance Due June 30</th>
<th>Due Within One Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>$</td>
<td>$ 1,712,396</td>
<td>$ 30,533,166</td>
</tr>
<tr>
<td>$</td>
<td>$ 1,734,655</td>
<td></td>
</tr>
</tbody>
</table>

## Bond and Note Defeasance

GASB Statement No. 7, Advance Refundings Resulting in Defeasance of Debt, provides that refunded debt and assets placed in escrow for the payment of related debt service be excluded from the financial statements. As of June 30, 2019, there were $1.3 billion in bonds from the primary government that have been refunded and defeased in-substance from the governmental activities column by placing existing assets and the proceeds of new bonds in irrevocable trusts to provide for all future debt service payments. In addition, there were $2.2 billion in bonds and notes outstanding considered defeased from the component units.

## Primary Government

In May 2019, the Commonwealth Transportation Board of the Commonwealth of Virginia issued $43.4 million in Commonwealth of Virginia Transportation Revenue Refunding Bonds Series 2019A with an interest rate ranging from 3.0 to 5.0 percent to advance refund the outstanding Commonwealth of Virginia Transportation Revenue Bonds Series 2009A-2 (Northern Virginia Transportation District Program - Taxable - Build America Bonds). The net proceeds from the sale of the Refunding Bonds and unspent funds of $49.5 million (after payment of underwriter’s fees and other issuance costs) were deposited to an irrevocable trust with an escrow agent to provide future debt service payments on the Refunded Bonds and to pay the costs related to issuance and refunding. As a result, the Refunded Bonds are considered to be defeased and the liability has been removed from the governmental activities column of the Statement of Net Position. The reacquisition price exceeded the net carrying value of the old debt by $150,486. The Northern Virginia Transportation District debt defeasance resulted in an accounting gain of $150,486. Total debt service payments will be reduced by $6.0 million over the next 15 years, resulting in an economic gain of $5.1 million, discounted at the rate of 2.2 percent.
Rebatable arbitrage need only be calculated for tax purposes every fifth year that debt is outstanding. Consistent with modified accrual basis of accounting, it is not recognized as a liability in governmental funds until amounts actually become due and payable; however, a liability is recognized in accrual basis government-wide statements as soon as the underlying event has occurred. Accordingly, as of June 30, 2019, the Virginia Resources Authority (major component unit) has recognized a liability of $247,785.

Amounts remitted to the Federal government for rebate liability are generally paid from earnings derived from the issue. However, if all proceeds have been expended and depending on the type of issue, it may be necessary to use project revenues or general or non-general fund appropriations to satisfy any rebate liability. During fiscal year 2019, no rebate payments were owed on the Commonwealth’s General Obligation Bonds, Virginia Public Building Authority, Commonwealth Transportation Board, the Virginia College Building Authority 21st Century or Pooled Bond Programs, or the Virginia Port Authority.

**Capital Leases**

The Commonwealth leases buildings and equipment under various agreements that are accounted for as capital leases. The lease agreements are for various terms and all leases contain nonappropriation clauses indicating that continuation of the lease is subject to funding by the General Assembly.

Gross minimum lease payments, together with the present value of the net minimum lease payments as of June 30, 2019, are shown in the following table (dollars in thousands).

<table>
<thead>
<tr>
<th>Year</th>
<th>Buildings</th>
<th>Equipment</th>
<th>Infrastructure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>8,413</td>
<td>$ —</td>
<td>$ 94,923</td>
<td>$ 103,336</td>
</tr>
<tr>
<td>2021</td>
<td>8,022</td>
<td>$ —</td>
<td>95,419</td>
<td>103,441</td>
</tr>
<tr>
<td>2022</td>
<td>7,889</td>
<td>$ —</td>
<td>97,332</td>
<td>105,221</td>
</tr>
<tr>
<td>2023</td>
<td>7,634</td>
<td>$ —</td>
<td>99,083</td>
<td>106,717</td>
</tr>
<tr>
<td>2024</td>
<td>7,617</td>
<td>$ —</td>
<td>95,394</td>
<td>103,011</td>
</tr>
<tr>
<td>2025-2029</td>
<td>9,931</td>
<td>$ —</td>
<td>529,332</td>
<td>549,263</td>
</tr>
<tr>
<td>2030-2034</td>
<td>2,624</td>
<td>$ —</td>
<td>567,257</td>
<td>570,881</td>
</tr>
<tr>
<td>2035-2039</td>
<td>2,291</td>
<td>$ —</td>
<td>600,742</td>
<td>603,033</td>
</tr>
<tr>
<td>2040-2044</td>
<td>1,372</td>
<td>$ —</td>
<td>648,503</td>
<td>650,875</td>
</tr>
<tr>
<td>2045-2049</td>
<td>—</td>
<td>$ —</td>
<td>668,662</td>
<td>668,662</td>
</tr>
<tr>
<td>2050-2054</td>
<td>—</td>
<td>$ —</td>
<td>754,824</td>
<td>754,824</td>
</tr>
<tr>
<td>2055-2059</td>
<td>—</td>
<td>$ —</td>
<td>817,174</td>
<td>817,174</td>
</tr>
<tr>
<td>2060-2064</td>
<td>—</td>
<td>$ —</td>
<td>884,673</td>
<td>884,673</td>
</tr>
<tr>
<td>2065-2069</td>
<td>—</td>
<td>$ —</td>
<td>311,626</td>
<td>311,626</td>
</tr>
</tbody>
</table>

**Note (3):** In addition to the above, land purchased under capital leases by the University of Virginia (nonmajor) is $8,095 (dollars in thousands).
Notes Payable

Notes Payable consist of several items as shown in the following schedule (dollars in thousands):

Primary Government
Installment Notes from Direct Borrowings $ 115,449
Total Primary Government 115,449

Component Units
Virginia Public School Authority 189,935
Virginia Resources Authority from Direct Borrowings 84,036
Nonmajor Component Units 1,822,047
Nonmajor Component Units from Direct Borrowings 93,870
Installment Notes from Direct Borrowings 55,259
Subtotal (excluding Foundations) 2,245,147

Foundations:
Notes Payable 269,662
Subtotal - Foundations 269,662

Total Component Units 2,514,809

Total Notes Payable $ 2,630,258

The Virginia Public School Authority (major component unit) notes of $189.9 million are for the School Technology and Security Notes Program. The note proceeds were used to finance technology equipment purchases and to make grants to school divisions for the purchase of security equipment. The notes will be repaid from appropriations to be made by the Virginia General Assembly from the Literary Fund (major special revenue).

The Virginia Resources Authority (major component unit) direct borrowing note of $84.0 million is for the Series 2019 Clean Water State Match and contains a provision that in the event of default, the annual interest rate increases to the higher of the Prime Rate plus 4.0 percent, the Federal Funds Rate plus 5.0 percent or 10.0 percent.

An additional amount of $1.8 billion is comprised primarily of higher education institutions’ (nonmajor component units) promissory notes with the Virginia College Building Authority (VCBA) (major component unit) to finance the construction of various higher education facilities pursuant to the Pooled Bond Program. Interest rates range from 2.0 percent to 5.6 percent and shall be paid semi-annually and the planned interest payments total $567.7 million. Additionally, in accordance with the American Recovery and Reinvestment Act, the Commonwealth expects to receive a Build America Bonds (BABs) interest subsidy to reimburse interest payments of $23.5 million. The final principal payment is due in fiscal year 2049.

The following higher education institutions (nonmajor component units) reported notes payables primarily for construction: Virginia Commonwealth University Health System Authority (Authority) (a blended component unit of the Virginia Commonwealth University – nonmajor component unit) $91.3 million; and Virginia State University $476,991.

Various foundations (component units) have notes outstanding as of year-end. The purpose of a majority of these notes is for property acquisition, working capital, and construction. Future principal payments as of June 30, 2019, are shown in the following table (dollars in thousands).

<table>
<thead>
<tr>
<th>Year</th>
<th>Maturity</th>
<th>Principal</th>
<th>Interest</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>108,865</td>
<td>15,725</td>
<td>$ 124,590</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>112,377</td>
<td>12,213</td>
<td>$ 124,590</td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>116,003</td>
<td>8,587</td>
<td>$ 124,590</td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td>119,746</td>
<td>4,845</td>
<td>$ 124,591</td>
<td></td>
</tr>
<tr>
<td>2024</td>
<td>61,313</td>
<td>981</td>
<td>62,294</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>518,304</td>
<td>42,351</td>
<td>$ 560,655</td>
<td></td>
</tr>
</tbody>
</table>

Note (1): Foundations represent FASB reporting entities defined in Note 1.B.

Installment purchase obligations have been entered into by agencies and institutions of the Commonwealth. These agreements, other than those in the component units and certain institutions of higher education, contain nonappropriation clauses indicating that continuation of the installment purchase obligations is subject to funding by the General Assembly. Installment purchase obligations represent $170.7 million of the total outstanding debt of the Commonwealth. Presented in the following tables are repayment schedules for installment purchase obligations as of June 30, 2019.

Installment Purchase Obligations from Direct Borrowings

Governmental Funds
June 30, 2019

<table>
<thead>
<tr>
<th>Year</th>
<th>Maturity</th>
<th>Principal</th>
<th>Interest</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>15,124,782</td>
<td>2,756,841</td>
<td>17,881,623</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>16,718,377</td>
<td>2,533,763</td>
<td>19,252,140</td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>16,110,103</td>
<td>2,106,259</td>
<td>18,216,362</td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td>13,840,521</td>
<td>1,696,224</td>
<td>15,536,745</td>
<td></td>
</tr>
<tr>
<td>2024</td>
<td>11,876,688</td>
<td>1,360,851</td>
<td>13,237,539</td>
<td></td>
</tr>
<tr>
<td>2025-2029</td>
<td>31,257,392</td>
<td>3,124,357</td>
<td>34,381,749</td>
<td></td>
</tr>
<tr>
<td>2030-2034</td>
<td>9,979,751</td>
<td>714,634</td>
<td>10,694,685</td>
<td></td>
</tr>
<tr>
<td>2035-2039</td>
<td>23,490</td>
<td>264</td>
<td>23,754</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>114,931,104</td>
<td>14,293,493</td>
<td>$ 129,224,597</td>
<td></td>
</tr>
</tbody>
</table>

Installment Purchase Obligations from Direct Borrowings

Business-type Activities
June 30, 2019

<table>
<thead>
<tr>
<th>Year</th>
<th>Maturity</th>
<th>Principal</th>
<th>Interest</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>108,865</td>
<td>15,725</td>
<td>$ 124,590</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>112,377</td>
<td>12,213</td>
<td>$ 124,590</td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>116,003</td>
<td>8,587</td>
<td>$ 124,590</td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td>119,746</td>
<td>4,845</td>
<td>$ 124,591</td>
<td></td>
</tr>
<tr>
<td>2024</td>
<td>61,313</td>
<td>981</td>
<td>62,294</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>518,304</td>
<td>42,351</td>
<td>$ 560,655</td>
<td></td>
</tr>
</tbody>
</table>
Installment Purchase Obligations from Direct Borrowings
Component Units
June 30, 2019

<table>
<thead>
<tr>
<th>Maturity</th>
<th>Principal</th>
<th>Interest</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>$8,136,270</td>
<td>$1,268,624</td>
<td>$9,404,894</td>
</tr>
<tr>
<td>2021</td>
<td>10,723,610</td>
<td>1,100,713</td>
<td>11,824,323</td>
</tr>
<tr>
<td>2022</td>
<td>5,892,734</td>
<td>931,861</td>
<td>6,824,595</td>
</tr>
<tr>
<td>2023</td>
<td>5,032,523</td>
<td>804,611</td>
<td>5,837,134</td>
</tr>
<tr>
<td>2024</td>
<td>4,593,390</td>
<td>685,540</td>
<td>5,278,930</td>
</tr>
<tr>
<td>2025-2029</td>
<td>14,100,794</td>
<td>1,999,518</td>
<td>16,100,312</td>
</tr>
<tr>
<td>2030-2034</td>
<td>6,780,000</td>
<td>447,699</td>
<td>7,227,699</td>
</tr>
<tr>
<td>Total</td>
<td>$55,259,321</td>
<td>$7,238,566</td>
<td>$62,497,887</td>
</tr>
</tbody>
</table>

The foundations (component units) had no installment purchase obligations as of June 30, 2019.

On May 23, 2016, the Virginia Department of Transportation (VDOT) (primary government) and Chesterfield County (County) signed a memorandum of understanding concerning payment of interest relating to the County’s contribution to VDOT for the construction of the Powhite Parkway Extension Project. The parties agreed that the interest to be paid by VDOT on the County’s contribution to the construction of the Powhite Parkway Extension is $18.5 million. The interest requirement paid during fiscal year 2019 totaled $1.4 million. The remaining outstanding interest amount of $4.8 million is payable in annual installments on September 1 in the years 2019 to 2022. This interest is applicable to a note payable that VDOT repaid to the County in fiscal year 2014.

Lottery Prizes Payable

Lottery prizes are paid in 20, 25, 26, or 30 installments. The first installment is paid on the day the prize is claimed. The subsequent annual payments are funded with U.S. Treasury STRIPS purchased by the Virginia Lottery. For Life prizes payable represent 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.

Lottery prizes payable represent the future annual prize payments valued at cost plus accrued interest (current value of securities held to maturity) of the assets funding the payments.

Lottery prizes payable for the fiscal year ended June 30, 2019, are shown in the following table:

<table>
<thead>
<tr>
<th></th>
<th>Jackpot Win For Life</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Due within one year</td>
<td>$5,651,248</td>
<td>$5,039,615</td>
</tr>
<tr>
<td>Due in subsequent years</td>
<td>42,071,002</td>
<td>60,220,748</td>
</tr>
<tr>
<td>Total (current value)</td>
<td>47,722,250</td>
<td>65,259,363</td>
</tr>
<tr>
<td>Add: Interest to Maturity</td>
<td>15,295,750</td>
<td>27,954,637</td>
</tr>
<tr>
<td>Lottery Prizes Payable at Maturity</td>
<td>$63,018,000</td>
<td>$93,215,000</td>
</tr>
</tbody>
</table>

Tuition Benefits Payable

The Virginia College Savings Plan administers the Prepaid529 program. Prepaid529 offers contracts at actuarially determined amounts that provide for future tuition and mandatory fee payments at state higher education institutions. The contract provisions also allow the benefits to be used for private or out-of-state institutions at differing amounts.

As of June 30, 2019, tuition benefits payable of $2.0 billion have been recorded for the Prepaid529 program on the statement of net position for the actuarially determined present value of future obligations anticipated for payment of benefits and administrative expenses for the Prepaid529 program. In addition, a receivable in the amount of $209.7 million has been recorded to reflect the actuarially determined present value of future payments anticipated from contract holders.
29. OTHER REVENUE

The following table (dollars in thousands) summarizes Other Revenue for the fiscal year ended June 30, 2019.

<table>
<thead>
<tr>
<th>Assessments and Receipts for Support of Special Services</th>
<th>Fines, Forfeitures, Court Fees, Penalties, and Escheats</th>
<th>Receipts from Cities, Counties, and Towns</th>
<th>Private Gifts, Grants, and Contracts</th>
<th>Sales of Property</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Government:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>$ 5,803</td>
<td>$ 223,737</td>
<td>$ 11,763</td>
<td>$ 965</td>
</tr>
<tr>
<td>Major Special Revenue Funds:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commonwealth Transportation</td>
<td>20,167</td>
<td>23,874</td>
<td>332,960</td>
<td>12,837</td>
</tr>
<tr>
<td>Federal Trust</td>
<td>—</td>
<td>323</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Literary</td>
<td>—</td>
<td>47,409</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Nonmajor Governmental Funds</td>
<td>125,513</td>
<td>66,590</td>
<td>74,455</td>
<td>7,763</td>
</tr>
<tr>
<td>Major Enterprise Funds:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment Compensation</td>
<td>—</td>
<td>193</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Nonmajor Enterprise Funds</td>
<td>—</td>
<td>15,610</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Private Purpose Trust Funds</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Pension and Other Employee Benefit Trust Funds</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total Primary Government</td>
<td>$ 151,483</td>
<td>$ 377,736</td>
<td>$ 419,178</td>
<td>$ 21,565</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tobacco Master Settlement</th>
<th>Taxes</th>
<th>Other (1)</th>
<th>Total Other Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Government:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>$ 56,487</td>
<td>—</td>
<td>$ 62,457</td>
</tr>
<tr>
<td>Major Special Revenue Funds:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commonwealth Transportation</td>
<td>—</td>
<td>—</td>
<td>151,595</td>
</tr>
<tr>
<td>Federal Trust</td>
<td>—</td>
<td>—</td>
<td>4,702</td>
</tr>
<tr>
<td>Literary</td>
<td>—</td>
<td>—</td>
<td>10</td>
</tr>
<tr>
<td>Nonmajor Governmental Funds</td>
<td>—</td>
<td>—</td>
<td>302,957</td>
</tr>
<tr>
<td>Major Enterprise Funds:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment Compensation</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Nonmajor Enterprise Funds</td>
<td>—</td>
<td>4,880</td>
<td>1,501</td>
</tr>
<tr>
<td>Private Purpose Trust Funds</td>
<td>—</td>
<td>—</td>
<td>173</td>
</tr>
<tr>
<td>Pension and Other Employee Benefit Trust Funds</td>
<td>—</td>
<td>—</td>
<td>4,107</td>
</tr>
<tr>
<td>Total Primary Government</td>
<td>$ 56,487</td>
<td>4,880</td>
<td>$ 527,502</td>
</tr>
</tbody>
</table>

Note (1): $36,900 (dollars in thousands) and $103,750 (dollars in thousands) are related to prior year expenditures refunded in the current fiscal year for the General Fund and the Commonwealth Transportation Fund, respectively. The total amount recorded for the Literary Fund is related to unclaimed prizes in the Virginia Lottery. $157,273 (dollars in thousands) is related to proceeds from unclaimed property in the Unclaimed Property Fund, $53,773 (dollars in thousands) is related to indirect costs, charge card rebate fees and court collection fees in the Other Special Revenue Fund, $26,642 (dollars in thousands) is related to welfare activity receipts in the Health and Social Services Special Revenue Fund, and the remaining $65,269 (dollars in thousands) is related to other miscellaneous activities in the nonmajor governmental funds.
30. TAX ABATEMENTS

GASB Statement No. 77, *Tax Abatements*, requires disclosures to be made for tax abatements. These arise from agreements between the Commonwealth and taxpayers and result in reduced tax revenue when the taxpayer promises to provide economic benefits to the Commonwealth. As of June 30, 2019, the Commonwealth participates in the following tax abatements programs in excess of $1.0 million. There are no provisions for recapturing abated taxes since the requirements must be met prior to receiving the abatement.

- The Retail Sales and Use Tax Data Center Exemptions are intended to attract data centers to the Commonwealth pursuant to Title 58.1-609.3(18) of the *Code of Virginia*. Qualifying entities may purchase or lease certain computer equipment, enabling software and other enabling hardware for use in the data center exempt from the retail sales and use tax. Each recipient’s retail sales and use taxes are reduced by being able to purchase qualifying items for use in the data center without having to pay the retail sales and use tax on the purchase price. The amount of the abatement for each recipient is determined by multiplying the purchase price of the qualifying computer equipment, enabling software and other enabling hardware purchased by the recipient by the rate of the retail sales and use tax that would be imposed on the purchase if the exemption was not available. The rate of the retail sales and use tax is 6.0 percent in the Northern Virginia and Hampton Roads localities and 5.3 percent in the remainder of the state. The exemption is available for data centers that (i) are located in a Virginia locality; (ii) result in a new capital investment of at least $150.0 million on or after January 1, 2009; and (iii) meet specified employment and salary requirements. On or after July 1, 2009, the data center or tenants must result in the creation of at least 50 new jobs paying at least one and one-half the prevailing average wage in the locality, or 25 new jobs paying at least one and one-half the prevailing average wage in the locality if the data center is located in a locality that has an unemployment rate for the preceding year of at least 150.0 percent of the average statewide unemployment rate or is located in an enterprise zone. Effective July 1, 2012, the exemption was extended to purchases and leases made by tenants of a data center that meets the requirements of the data center exemption.

In order to qualify for the exemption, the data center operator must enter into a memorandum of understanding with the Virginia Economic Development Partnership Authority (component unit). The exemption is scheduled to sunset June 30, 2035. The amount of abated taxes for fiscal year 2019 is $92.2 million.

- The Motion Picture Production Tax Credit is intended to encourage the filming of motion picture productions in the Commonwealth. Pursuant to Section 58.1-439.12:03 of the *Code of Virginia*, a motion picture production company with qualifying expenses of at least $250,000 may abate its individual income tax or corporate income tax liability by the amount of the Motion Picture Production Tax Credit. The amount of the tax credit is equal to (i) 15.0 percent of the production company’s qualifying expenses or (ii) 20.0 percent of such expenses if the production is filmed in an economically distressed area of the Commonwealth. In addition, the credit for the qualifying expenses incurred by a motion picture production company, such company may receive an Additional Virginia Resident Credit and an Additional Virginia Resident First-Time Industry Employee Credit. The Additional Virginia Resident Credit equals (i) 10.0 percent of the total aggregate payroll for Virginia residents employed in connection with the production of a film in Virginia when total production costs in Virginia are at least $250,000, but not more than $1.0 million or (ii) 20.0 percent of the total aggregate payroll of such residents when total production costs in Virginia exceed $1.0 million. The Additional Virginia Resident First-Time Industry Employee Credit is equal to 10.0 percent of the total aggregate payroll for Virginia residents employed for the first time as actors or members of a production crew in connection with the production of a film in Virginia.

The Motion Picture Production Tax Credit is a refundable tax credit. Therefore, if the amount of credit that a company is allowed to claim exceeds the company’s tax liability for the taxable year, the excess amount of credit will be refunded to the company. Companies must have a memorandum of understanding with the Virginia Film Office (part of primary government) in order to participate in this program.

The credit is scheduled to sunset January 1, 2022. The annual cap on the amount of credits granted during a fiscal year is $6.5 million, and this amount is expected to be claimed annually. While a motion picture production company may receive approval within a given year, the credits are not claimed by the taxpayer until filing a return. As a result, the credits claimed in a fiscal year may fluctuate compared to the $6.5 million annual cap. For fiscal year 2019, no taxes were abated, however, it is anticipated that abatements will resume in fiscal year 2020.
31. PRIZES AND CLAIMS

The following table summarizes Prizes and Claims Expense for the fiscal year ended June 30, 2019.

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Insurance Claims</th>
<th>Lottery Prize Expense</th>
<th>Total Prizes and Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Funds:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major Enterprise Funds:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia Lottery</td>
<td>$ —</td>
<td>$ 1,399,749</td>
</tr>
<tr>
<td>Unemployment Compensation</td>
<td>273,566</td>
<td>—</td>
</tr>
<tr>
<td>Nonmajor Enterprise Funds</td>
<td>476,936</td>
<td>—</td>
</tr>
<tr>
<td>Total Enterprise Funds</td>
<td>$ 750,502</td>
<td>$ 1,399,749</td>
</tr>
<tr>
<td>Internal Service Funds</td>
<td>$ 1,472,386</td>
<td>—</td>
</tr>
</tbody>
</table>

32. OTHER EXPENSES

The following table summarizes Other Expenses for the fiscal year ended June 30, 2019.

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Grants and Distributions To Localities</th>
<th>Expendable Equipment/ Improvements</th>
<th>Other (1)</th>
<th>Total Other Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Funds:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major Enterprise Funds:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia College Savings Plan</td>
<td>$ —</td>
<td>$ 671</td>
<td>$ 2,185</td>
</tr>
<tr>
<td>Nonmajor Enterprise Funds</td>
<td>94</td>
<td>2,932</td>
<td>379</td>
</tr>
<tr>
<td>Total Enterprise Funds</td>
<td>$ 94</td>
<td>$ 3,603</td>
<td>$ 2,564</td>
</tr>
<tr>
<td>Internal Service Funds</td>
<td>$ 1,886</td>
<td>$ 2,452</td>
<td>$ 6,497</td>
</tr>
<tr>
<td>Pension and Other Employee Benefit Trust Funds (2)</td>
<td>$ —</td>
<td>$ —</td>
<td>$ 11,522</td>
</tr>
</tbody>
</table>

Note (1): $2,185 (dollars in thousands) can be attributed to the Prepaid529 Program for the SOAR scholarship program and other promotional scholarships. $5,899 (dollars in thousands) can be attributed to expenses related to cyber insurance in the Risk Management internal service fund and $435,739 can be attributed to Affordable Care Act related fees in the Health Care Fund internal service fund.

Note (2): Fiduciary expenses of $11,522 (dollars in thousands) are not included in the Government-wide Statement of Activities.
33. OTHER NON-OPERATING REVENUE/EXPENSES

The following table summarizes Other Non-Operating Revenue/Expenses for the fiscal year ended June 30, 2019. (Dollars in Thousands)

<table>
<thead>
<tr>
<th>Proprietary Funds:</th>
<th>Gain/(Loss) on Sale of Capital Assets</th>
<th>Securities Lending</th>
<th>Interest Expense</th>
<th>Other (1)</th>
<th>Total Other Non-Operating Revenue/Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Enterprise Funds:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia Lottery</td>
<td>$33</td>
<td>$ (332)</td>
<td>$ —</td>
<td>$ 381</td>
<td>$ 82</td>
</tr>
<tr>
<td>Virginia College Savings Plan</td>
<td>(26)</td>
<td>(8)</td>
<td>—</td>
<td>—</td>
<td>(34)</td>
</tr>
<tr>
<td>Nonmajor Enterprise Funds</td>
<td>—</td>
<td>(489)</td>
<td>(11)</td>
<td>9,191</td>
<td>8,691</td>
</tr>
<tr>
<td>Total Enterprise Funds</td>
<td>$7</td>
<td>7</td>
<td>$(829)</td>
<td>$(11)</td>
<td>$ 9,572</td>
</tr>
<tr>
<td>Internal Service Funds</td>
<td>$1,259</td>
<td>$(1,529)</td>
<td>$(1,327)</td>
<td>74</td>
<td>$(1,523)</td>
</tr>
</tbody>
</table>

Note (1): Other Non-Operating Revenue/Expenses of the nonmajor enterprise funds are primarily comprised of amounts reported by Alcoholic Beverage Control.

34. TRANSFERS

The following table summarizes Transfers In and Transfers Out for the fiscal year ended June 30, 2019 (dollars in thousands).

<table>
<thead>
<tr>
<th>Transfers Out (Reported In):</th>
<th>General</th>
<th>Commonwealth Transportation</th>
<th>Federal Trust</th>
<th>Literary</th>
<th>Nonmajor Governmental Funds</th>
<th>Nonmajor Enterprise Funds</th>
<th>Internal Service Funds</th>
<th>Total Primary Government</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Government</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$414,827</td>
</tr>
<tr>
<td>Major Special Revenue Funds:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commonwealth Transportation</td>
<td>31,738</td>
<td>—</td>
<td>2</td>
<td>—</td>
<td>427,812</td>
<td>—</td>
<td>388</td>
<td>459,940</td>
</tr>
<tr>
<td>Federal Trust</td>
<td>500</td>
<td>8,120</td>
<td>—</td>
<td>—</td>
<td>1,281</td>
<td>121</td>
<td>—</td>
<td>10,022</td>
</tr>
<tr>
<td>Nonmajor Governmental Funds</td>
<td>62,112</td>
<td>377</td>
<td>199</td>
<td>130,000</td>
<td>28,861</td>
<td>—</td>
<td>—</td>
<td>221,549</td>
</tr>
<tr>
<td>Major Enterprise Funds:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia Lottery</td>
<td>649,704</td>
<td>—</td>
<td>—</td>
<td>1,955</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>651,659</td>
</tr>
<tr>
<td>Virginia College Savings Plan</td>
<td>381</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>381</td>
<td></td>
</tr>
<tr>
<td>Unemployment Compensation</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>1,480</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>1,480</td>
</tr>
<tr>
<td>Nonmajor Enterprise Funds</td>
<td>206,416</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>15,581</td>
<td>—</td>
<td>—</td>
<td>221,997</td>
</tr>
<tr>
<td>Internal Service Funds</td>
<td>878</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>6,752</td>
<td>—</td>
<td>—</td>
<td>7,630</td>
</tr>
<tr>
<td>Total Primary Government</td>
<td>$951,729</td>
<td>$16,113</td>
<td>$1,688</td>
<td>$131,955</td>
<td>$887,490</td>
<td>$121</td>
<td>$388</td>
<td>$1,989,485</td>
</tr>
</tbody>
</table>

Transfers are used to (1) move revenues from the fund that the Code of Virginia or budget requires to collect them to the fund that the Code of Virginia or budget requires to expend them; (2) move receipts restricted for debt service from the funds holding the resources to the debt service fund as principal and interest payments become due; and (3) move unrestricted revenues collected in the General Fund to finance various programs accounted for in other funds in accordance with budgetary authorizations.

During the fiscal year, the following significant transfers were made that do not occur on a routine basis or are inconsistent with the activities of the fund making the transfer.

Various nongeneral funds transferred approximately $18.2 million to the General Fund as required by Chapter 854, 2019 Virginia Acts of Assembly.
35. ENDOWMENTS

Donor restricted endowments reside primarily within the higher education institutions. The net appreciation available for expenditure is $1.5 billion as of June 30, 2019. Of this amount, $1.9 million is reported as unrestricted net position and the remainder is reported as restricted net position. The Code of Virginia authorizes acceptance of donations. The governing boards of these entities and the donor agreements determine whether net appreciation can be spent and the accepted spending rate. These policies are entity specific and vary with each institution.

36. CASH FLOWS – ADDITIONAL DETAILED INFORMATION

The following table (dollars in thousands) summarizes specific cash flows for the fiscal year ended June 30, 2019.

<table>
<thead>
<tr>
<th>Cash Flows Resulting from:</th>
<th>Virginia Lottery</th>
<th>Virginia College Savings Plan</th>
<th>Unemployment Compensation</th>
<th>Nonmajor Enterprise Funds</th>
<th>Total Enterprise Funds</th>
<th>Internal Service Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payments for Prizes, Claims, and Loss Control:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lottery Prizes</td>
<td>$ (1,418,938)</td>
<td>$ —</td>
<td>$ —</td>
<td>$ —</td>
<td>$ (1,418,938)</td>
<td>$ —</td>
</tr>
<tr>
<td>Claims and Loss Control</td>
<td>—</td>
<td>$ (282,473)</td>
<td>$ (471,856)</td>
<td>$ (754,329)</td>
<td>(1,513,333)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$ (1,418,938)</td>
<td>$ (282,473)</td>
<td>$ (471,856)</td>
<td>$ (2,173,267)</td>
<td>$ (1,513,333)</td>
<td></td>
</tr>
<tr>
<td>Other Operating Revenue</td>
<td>$ —</td>
<td>$ —</td>
<td>$ 152</td>
<td>$ 5,206</td>
<td>$ 5,358</td>
<td>$ —</td>
</tr>
<tr>
<td>Total</td>
<td>$ —</td>
<td>$ —</td>
<td>$ 152</td>
<td>$ 5,206</td>
<td>$ 5,358</td>
<td>$ —</td>
</tr>
<tr>
<td>Other Operating Expense (1)</td>
<td>$ —</td>
<td>$ (2,185)</td>
<td>$ —</td>
<td>$ (2,265)</td>
<td>$ (4,450)</td>
<td>$ (10,011)</td>
</tr>
<tr>
<td>Total</td>
<td>$ —</td>
<td>$ (2,185)</td>
<td>$ —</td>
<td>$ (2,265)</td>
<td>$ (4,450)</td>
<td>$ (10,011)</td>
</tr>
<tr>
<td>Other Noncapital Financing Receipt Activities:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advances/Contributions from the Commonwealth</td>
<td>$ —</td>
<td>$ —</td>
<td>$ —</td>
<td>$ 44,995</td>
<td>$ 44,995</td>
<td>$ 155,780</td>
</tr>
<tr>
<td>Receipts from Taxes</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>261,457</td>
<td>261,457</td>
<td>—</td>
</tr>
<tr>
<td>Other Noncapital Financing Receipt Activities</td>
<td>399</td>
<td>—</td>
<td>5</td>
<td>75</td>
<td>479</td>
<td>163</td>
</tr>
<tr>
<td>Total</td>
<td>$ 399</td>
<td>$ —</td>
<td>$ 5</td>
<td>$ 306,527</td>
<td>$ 306,931</td>
<td>$ 155,943</td>
</tr>
<tr>
<td>Other Noncapital Financing Disbursement Activities:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repayments of Advances/Contributions from the Commonwealth</td>
<td>$ —</td>
<td>$ —</td>
<td>$ —</td>
<td>$ (40,452)</td>
<td>$ (40,452)</td>
<td>$ (97,378)</td>
</tr>
<tr>
<td>Other Noncapital Financing Disbursements</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(17)</td>
<td>(17)</td>
<td>(823)</td>
</tr>
<tr>
<td>Total</td>
<td>$ —</td>
<td>$ —</td>
<td>$ —</td>
<td>$ (40,469)</td>
<td>$ (40,469)</td>
<td>$ (98,201)</td>
</tr>
</tbody>
</table>

Note (1): $2,185 (dollars in thousands) can be attributed to SOAR scholarship expenses and other scholarships and awards. Also, $5,899 (dollars in thousands) can be attributed to expenses related to cyber insurance in the Risk Management internal service fund and $435,739 can be attributed to Affordable Care Act related fees in the Health Care Fund internal service fund.
37. TOBACCO SETTLEMENT AND SECURITIZATION

On November 23, 1998, 46 states' Attorneys General and the major tobacco companies signed a proposed settlement that reimburses states for smoking-related medical expenses paid through Medicaid and other healthcare programs. At the time of the settlement, it was estimated that the Commonwealth could receive approximately $4.1 billion over the duration of the settlement. The settlement was approved in a Consent Decree in December 1998. On March 29, 1999, the General Assembly enacted a law approving the establishment of the Tobacco Region Revitalization Commission (nonmajor component unit), in compliance with the Consent Decree, to help communities in Virginia hurt by the decline of tobacco.

The Commission was established for the purposes of determining the appropriate recipients of monies in the Tobacco Indemnification and Community Revitalization Fund. The monies are to be used to provide payments to tobacco farmers as compensation for the tobacco equipment and barns and lost tobacco production opportunities associated with a decline in quota. The monies are also to be used to revitalize tobacco dependent communities.

The General Assembly also created the Virginia Foundation for Healthy Youth (Foundation) (nonmajor component unit). The purpose of the Foundation is to determine the appropriate recipients of monies in the Virginia Tobacco Settlement Fund. The Foundation will also be responsible for distributing monies for the purposes provided in the legislation. Disbursements can be made to assist in financing efforts to restrict the use of tobacco products by minors, through educational and awareness programs describing the health effects of tobacco use on minors, and laws restricting the distribution of tobacco products to minors.

Additionally, the General Assembly created two special non-reverting funds. The Tobacco Settlement monies were accounted for in these funds and in the General Fund. Of the Settlement monies, 50.0 percent was deposited into the Tobacco Indemnification and Community Revitalization Fund at the Commission and 10.0 percent continues to be deposited into the Virginia Tobacco Settlement Fund at the Foundation. The remaining 40.0 percent continues to be reported in the General Fund.

Pursuant to Purchase and Sale Agreements executed in 2005 and 2007, the Commonwealth, acting as an agent on behalf of the Commission, sold the Commission's future right, title and interest in the Tobacco Settlement Revenues (TSRs) to the Tobacco Settlement Financing Corporation (Corporation) (related organization).

Consideration paid by the Corporation to the Commission for TSRs consisted of a cash amount deposited into an endowment to fund the long-term spending plan approved by the Commission. Bonds issued by the Corporation to finance the purchase price are asset-backed instruments secured solely by the Corporation's right to receive TSRs. At the time of issuance these revenues were expected to produce sufficient funds to repay the bond obligations issued by the Corporation.

The Commission is a nonmajor component unit of the Commonwealth, and the Corporation is disclosed as a related organization.

38. SERVICE CONCESSION ARRANGEMENTS

GASB Statement No. 60, Accounting and Financial Reporting for Service Concession Arrangements, describes the criteria for when an arrangement is classified as a Service Concession Arrangement (SCA). The basic criteria are: the operator of the capital asset owned by the transferor has the right to provide services in exchange for significant consideration; the operator's revenue must come from a third party; the transferor must retain some level of control over the asset; and the transferor must receive significant residual interest at the conclusion of the arrangement.

Primary Government

The Commonwealth of Virginia has five SCAs as of June 30, 2019: Pocahontas 895, the 495 Express Lanes, Elizabeth River – Midtown Tunnel, the 95 Express Lanes, and the I-66 Outside the Beltway Express Lanes. They are all related to highway construction and operation and were established per the Public-Private Transportation Act of 1995, as amended (PPTA). PPTA project goals are to provide highway projects to the public in a timely and cost effective manner with private funding and support.

Pocahontas 895

On June 21, 2006, the Pocahontas Parkway Association (Association – previously reported as a blended component unit of the Virginia Department of Transportation (VDOT), part of primary government) signed an agreement with Transurban (895) LLC (Transurban). Under the terms of the agreement, all assets and rights of the Association under the Comprehensive Agreement with VDOT were transferred to Transurban. In exchange for the existing toll road and other assets, Transurban transferred sufficient funds and securities to pay or defease all outstanding bonds of the Association and pay all other outstanding obligations owed to VDOT. Additionally, Transurban agreed to construct an enhancement to the original toll road, and this enhancement was completed and placed in service in 2011.

During the 99-year agreement term, VDOT will have fee title or good and valid interest in the asset. VDOT retains the right of inspection of the asset and has outlined maximum toll charges and increases in the terms of the agreement. Capital assets of $337.2 million and deferred inflow balances of $495.0 million are included in the government-wide financial statements. No contractual liabilities exist for this arrangement as of June 30.

During fiscal year 2014, the Transurban Board approved the transfer of Pocahontas 895 to the lenders of the asset due to lower revenues than anticipated. On May 15, 2014, DBi Services assumed control of Pocahontas 895. In December 2016, the majority owner of toll rights,
Macquarie and other rights owners closed on the sale of 100.0 percent of the tolling rights to Globalvia. Macquarie CAF Management LLC, Pocahontas Holdings LLC and Meeko LLC entered into a Sale and Purchase Agreement with Pocahontas Parkway Holdings LLC and Magnolia Operations LLC (Globalvia Inversiones SAU Subsidiaries) (as the buyers) in September 2016. The acquisition was effective on December 20, 2016 after VDOT’s approval.

VDOT approved Globalvia Operations USA LLC as the new O&M contractor (as defined in the Concession Agreement) and the O&M agreement between Globalvia Operations USA LLC and Pocahontas Parkway Operations LLC (company the concession agreement with VDOT was transferred to after the acquisition in December 2016) on December 2017. Globalvia Operations USA LLC replaced DBi as the new O&M contractor in February 2018.

Globalvia acquired the company that had, at that time, the agreement with VDOT to develop, finance, operate, manage the tolls and maintain Route 895-Pocahontas Parkway. The concession agreement period will end in 2105.

495 Express Lanes

On December 19, 2007, VDOT signed an 80-year public-private partnership agreement with Capital Beltway Express, LLC. The purpose of this agreement is to build new express lanes to provide users with a faster and more reliable travel option. The construction of the express lanes was completed in November 2012.

During the 80-year agreement, VDOT maintains regulatory control and jurisdiction of the express lanes. VDOT will have fee title or good and valid interest in the express lanes. The lanes will remain open for the public as long as the applicable tolls are paid. Capital assets of $818.1 million and deferred inflows of $967.9 million are included in the government-wide financial statements. Liabilities are contingent on specific events occurring pursuant to the agreement.

In fiscal year 2019, VDOT worked with Capital Beltway Express, LLC under a draft Development Framework Agreement related to the northern extension of the 495 Express Lanes (495 Next), which is the approximately 2-mile extension of the existing express lanes from Route 738 to the vicinity of George Washington Memorial Parkway.

Elizabeth River – Midtown Tunnel

On December 5, 2011, VDOT signed a 58-year public private partnership agreement with Elizabeth River Crossings OPCO, LLC. The purposes of this agreement are to build and operate a new tunnel that will be adjacent to the existing Midtown Tunnel for crossing the Elizabeth River, provide improvements to the existing Midtown Tunnel and the Downtown Tunnel, and to provide various extensions and improvements of the Martin Luther King Jr. (MLK) Freeway and I-264. As of January 1, 2017 all project components of this agreement have reached substantial completion and are in service.

During the agreement, Elizabeth River Crossings OPCO, LLC will operate and maintain the road. The revenue source for the concessionaire will be toll collections, excluding the MLK Freeway, which will be used for maintenance, operating and return on investment for constructing the project. At the end of the 58-year term, control of and the rights to operate the facilities will revert back to VDOT. Capital assets of $892.8 million and deferred inflow balances of $884.1 million are included in the government-wide financial statements. Liabilities are contingent on specific events occurring pursuant to the agreement. In July 2017, VDOT issued a Department Project Enhancement directive for Elizabeth River Crossings OPCO LLC, to design and build noise barrier walls for the MLK Freeway. VDOT is committed for these costs estimated at $24.5 million and 30.0 percent of the design plan has been developed as of June 30, 2019. An additional project enhancement commitment previously disclosed for VDOT is a lighting project on the Downtown Tunnel which has been deleted with no cost incurred in fiscal year 2019 for this project. In addition to these project enhancements, the Federal Highway Administration (FHWA) has also required an annual traffic study over the next six fiscal years. The scope of the traffic study is being clarified with the FHWA as of June 30, 2019 and an estimate of the annual costs is still to be determined.

95 Express Lanes

On July 31, 2012, VDOT signed a 73-year public private partnership agreement with 95 Express Lanes, LLC. This project will create approximately 29 miles of Express Lanes on I-95 in Northern Virginia. The project will also add capacity to the existing high occupancy vehicle (HOV) lanes. The construction of the express lanes was completed in December 2014.

During the agreement, 95 Express Lanes LLC will operate and maintain the road. The revenue source for the concessionaire will be toll collections which will be used for maintenance, operating and return on investment for constructing the project. At the end of the 73-year term, control of and the rights to operate the facilities will revert back to VDOT. The lanes will remain open for the public as long as the applicable tolls are paid. Capital assets of $559.6 million and deferred inflows balances of $592.5 million are included in the government-wide financial statements. Liabilities are contingent on specific events occurring pursuant to the agreement.

During fiscal year 2016, the Commonwealth Transportation Board awarded a contract to design and construct a reversible extension of the 95 Express Lanes at the southern terminus in Stafford County. The approximately 2.5-mile extension will carry traffic beyond the location where the 95 Express Lanes currently end. The construction began in fiscal year 2017 and lanes opened to traffic on October 31, 2017. This 2.5-mile extension resulted in an increased value of $25.7 million to the 95 Express Lanes SCA. In addition, plans were announced by VDOT during fiscal year 2016, to extend the 95 Express Lanes north to I-395. This project involves expanding and converting two HOV lanes to three express lanes near the Pentagon. Construction on this 8-mile
extension began in summer of 2017 with project completion scheduled during 2020.

VDOT reached commercial close with Transurban on June 8, 2017, and financial close was completed on July 25, 2017, for this project.

On June 8, 2017, an amended and restated Comprehensive Agreement was signed between VDOT and 95 Express Lanes LLC to include the scope of the project work for the I-395 northern extension. The Comprehensive Agreement was updated to include this addition to the project and payments to the Department for Transit Improvements. In consideration for the rights granted by VDOT to 95 Express Lanes LLC, solely in respect of the I-395 Project, 95 Express Lanes LLC will agree to make a payment to VDOT of $15.0 million on the I-395 Project service commencement date and escalating annually thereafter at a rate of 2.5 percent per annum as such amounts per payment year are set forth in the Amended and Restated Comprehensive Agreement (ARCA).

In fiscal year 2017, planning was initiated on the additional extension of the Express Lanes from Garrisonville Road to Route 17 in Stafford County, which is about 10 miles. It will have direct connection with both the northbound and southbound Rappahannock River crossing projects and will be analyzing access points and operational improvements with the project.

On April 18, 2019, a second amended and restated Comprehensive Agreement was signed between VDOT and 95 Express Lanes LLC to add the scope of the project work for the Fredericksburg Extension. The Comprehensive Agreement was updated to include payments to VDOT. At financial close on April 30, 2019, 95 Express Lanes LLC paid $45.0 million Initial Permit Fee Buyout Payment. The Concessionaire also provided a right of way cost deposit of $2.5 million and $4.0 million for southbound Rappahannock River Crossing work overlap funding. Deferred inflows balance of $51.3 million is included in the fund financial statements. VDOT received an additional $65.9 million from 95 Express Lanes LLC at the additional financial close in July 2019, which is a sum of $11.5 million Private Activity Bonds (PABs) payment and $54.4 million design-build price protection benefits. At service commencement, the concessionaire will make payment of $232.0 million Final Permit Fee Buyout Payment as set forth in the second amended and restated Comprehensive Agreement.

I-66 Outside the Beltway Express Lanes

On December 8, 2016, a 50-year Public Private Partnership Agreement (the Agreement) between VDOT, the Department of Rail and Public Transportation (DRPT), and private partner, I-66 Express Mobility Partners LLC, was signed.

The $2.2 billion I-66 Outside the Beltway Project with Express Mobility Partners is to build express lanes on I-66 outside the I-495 Capital Beltway. During the 50-year Agreement, VDOT maintains regulatory control and jurisdiction of the express lanes. VDOT will have fee title or good and valid interest in the express lanes. The purpose of this Agreement is to build new express lanes to provide users with a faster and more reliable travel option.

The I-66 Outside the Beltway Project will include 22.5 miles of new express lanes alongside three regular lanes from I-495 to University Boulevard in Gainesville, Virginia. The project will also provide new and improved bus service and transit routes, new and improved park and ride lots, and interchange improvements to enhance safety and reduce congestion.

Express Mobility Partners will be responsible for all costs to design, build, operate and maintain the I-66 Express Lanes, without any upfront public contribution.

Financial close on the project occurred on November 9, 2017. Construction work continued on the project during fiscal year 2019. The express lanes will open to traffic in mid-2022. These lanes will remain open for the public as long as the applicable tolls are paid. Liabilities for VDOT from the Agreement are contingent on specific events occurring pursuant to the Agreement.

Express Mobility Partners provided $578.9 million as of June 30, 2018, as an up-front concession payment to the Commonwealth. Pending approval by the Commonwealth Transportation Board, these funds will be used for project oversight by VDOT, contingency risk during construction that is released during the construction period, and projects in the corridor as selected by the Commonwealth Transportation Board. Deferred inflows balance of $559.6 million is included in the fund financial statements.

Additional consideration to be provided by Express Mobility Partners includes several components of the permit fee established in the Agreement. A description of these components and the stipulations around receiving is provided below.

Express Mobility Partners is required to pay VDOT a permit fee that consists of transit funding payments, support for corridor improvements, and revenue sharing as further described below.

The transit funding payment portion of the permit fee that becomes due during the operating period will be payable after debt service and required reserve accounts, and will be subject to the lock-up provisions required in the Transportation Infrastructure Finance and Innovation Act (TIFIA) Loan Agreement, but prior to support for corridor improvements and distributions. If funds are insufficient to make scheduled transit funding payments at the time due, such payments or any unpaid portion thereof will be considered past due and will remain due and payable without interest charges. The net present value of these payments is $768.0 million.

The support for corridor improvements is to be paid as indicated in the Agreement. Amounts to be paid annually are contingent on actual toll revenues. The net present value of the support for corridor improvements is expected to total $350.0 million. At the end of the term of the Agreement, any unpaid balance of these payments is to be forgiven or cancelled.
Express Mobility Partners will make revenue sharing payments in amounts calculated based on actual cumulative net present value of gross revenue at the end of each year of the Agreement. The percentage of gross revenue to be paid by Express Mobility Partners to VDOT increases in accordance with a five-tier revenue sharing scale. Revenue sharing payments do not have to be made if transit funding payments or support for corridor improvements are past due or unpaid.

Additional information on these payments can be found in the Agreement executed between VDOT, DRPT, and Express Mobility Partners.

Component Units

Aramark – Dining Services

During the year ended June 30, 2015, the University of Virginia (nonmajor) entered into an agreement with Aramark Educational Services, LLC (Aramark) for Aramark to provide dining services to the University. In return for use of University facilities, Aramark is required to make certain payments to the University and the University is required to provide certain repair and maintenance services related to the facilities during the term of the agreement. As of June 30, 2019, the University has accrued a $12.8 million receivable, a $25.1 million liability and a $47.7 million deferred inflow of resources related to the service concession arrangement.

39. INFORMATION TECHNOLOGY INFRASTRUCTURE

The Comprehensive Infrastructure Agreement (CIA) was a contract between the Commonwealth of Virginia (Commonwealth) acting through the Virginia Information Technologies Agency (VITA) and Northrop Grumman Systems Corporation (NG). The Commonwealth’s primary goal was to significantly improve the Commonwealth’s IT infrastructure and the manner in which such infrastructure was operated, supported, and maintained for various IT infrastructure services (i.e. integration, service desk, mainframe, server and storage, voice and data network, messaging, security, and data center facilities). This contract was terminated for convenience effective August 17, 2018. At the termination date, the Commonwealth issued a payment for contractually required resolution and exit fees, totaling approximately $79.3 million. Furthermore, a legal settlement was later reached between NG and VITA whereby the Commonwealth issued a settlement payment totaling $35.8 million. The Commonwealth has signed new contracts with various IT service providers. The new service providers include SAIC for Multi-Services Integrator (MSI) services; Atos for managed security services; Unisys for server, storage, and data center services; Ironbow for end user computing services; Xerox for managed print services; and Verizon for voice and data network services. The contract terms range from five years to seven years, with additional renewal options on each.

Expenses in fiscal year 2019 associated with the new service providers were $138.3 million. The Commonwealth expects to spend an additional $904.8 million over the remaining life of the current contracts with the new suppliers.

40. CONTINGENCIES

A. Grants and Contracts

The Commonwealth has received federal grants for specific purposes that are subject to review and audit by the grantor agencies or their auditors. Claims against these resources are generally conditional upon compliance with the terms and conditions of grant agreements and applicable federal regulations, including the expenditure of resources for allowable purposes. Any disallowance resulting from a federal audit may become a liability of the Commonwealth.

Institutions of higher education (component units) and other state agencies are required to comply with various federal regulations issued by the Office of Management and Budget, if such agencies are recipients of federal grants, contracts, or other sponsored agreements. Failure to comply with certain requirements of these regulations may result in questions concerning the allowability of related direct and indirect charges pursuant to such agreements. It is believed that the ultimate disallowance pertaining to these regulations, if any, will be immaterial to the overall financial condition of the Commonwealth.

The U.S. Department of Health and Human Services (DHHS) Office of the Inspector General conducted a review and indicated that the Commonwealth’s Statewide Indirect Cost Allocation Plan rates have allowed over-recoveries and transfers in the internal service funds and portions of selected rebates. The Commonwealth has paid the amount it believes is owed for fiscal years 2009-2014, and appealed a DHHS determination letter indicating that an additional amount is owed for this time period. While the DHHS Departmental Appeals Board upheld the DHHS determination, the Commonwealth is currently continuing the appeal process. In October 2018, the Commonwealth paid an additional $10.3 million in order to cease interest assessment and prevent potential debt-set off actions on future federal drawdowns. The Commonwealth still disputes that this amount is owed and expects to recover this amount from the appeal settlement. Accordingly, this amount is not included in the accompanying financial statements.

Additionally, the DHHS has received the 2017 and 2016 payback schedules which are based on fiscal year 2016 and 2015 data, respectively. Further, the Commonwealth has computed payback schedules for 2019 and 2018 which are based on fiscal years 2018 and 2017 data, respectively. The Commonwealth has computed a liability of $25.4 million representing the amounts owed to the federal government for internal service fund over-recoveries and transfers, as well as the federal share of various rebates received. This amount has been reflected in the accompanying financial statements.
The Virginia Tourism Authority (nonmajor component unit) has unclaimed awards totaling $1.9 million payable to awardees upon submission of proper claims for reimbursement for the Marketing Leverage Program, in addition to, unclaimed awards totaling $135,719 payable to awardees upon submission of proper claims for reimbursement for the World War Tourism Program and Music Festival Program. Additionally, property at the Virginia/Maryland border to be used for the Gateway Welcome Center was donated to the Authority in July 2008. The deed to the property includes a covenant requiring any or all land to revert to the U.S. Government should it become needed for national defense. The net book value of the property as of June 30, 2019 was $813,850.

B. Litigation

The Commonwealth is named as a party in legal proceedings and investigations that occur in the normal course of governmental operations, some involving substantial amounts. It is not possible at the present time to estimate the ultimate outcome or liability, if any, of the Commonwealth in respect to the various proceedings; however, it is believed that any ultimate liability resulting from these suits or investigations will not have a material, adverse effect on the financial condition of the Commonwealth.

C. Subject to Appropriation

Both the primary government and the discretely presented component units enter into agreements and issue debt secured solely by future appropriations from the General Fund of the Commonwealth. The primary government has leases and other agreements of such debt of $2.9 billion. The discretely presented component units have such debt of $4.6 billion.

D. Bailment Inventory

The Virginia Alcoholic Beverage Control Authority (ABC) houses and controls bailment inventory in the warehouse and is therefore responsible for the exercise of reasonable care to preserve the inventory until it is purchased by ABC or returned to the supplier. ABC uses the bailment system for payment of merchandise for resale. ABC initiates payments to the vendors based on shipments from the ABC warehouse to the retail stores, rather than receipt of invoice from the vendor. As of June 30, 2019, the bailment inventory was valued at $50.1 million.

E. Loan Guarantees

The Virginia Small Business Financing Authority (VSBFA) (nonmajor component unit) has a loan guaranty program which provides guarantees up to the lesser of $500,000, or 75.0 percent, of a bank loan for lines of credit and short-term working capital loans for small businesses authorized by Section 2.2-2285 of the Code of Virginia. The relationship of the Commonwealth to the issuer or issuers of the obligations are private banks that contact VSBFA to obtain guarantees if they deem it necessary to approve the loan. The VSBFA staff underwrites the request for guarantees, and the Board of Directors makes the credit decision to approve or decline the loan. The Board has given VSBFA staff delegated authority to approve requests up to, and including, $500,000. The Board reviews all loan packages and ratifies all decisions. The length of time for the guarantees is up to five years for lines of credit and seven years for term loans. Upon a default or event of default under the loan documents and payment by VSBFA under the Guaranty Agreement, the borrower and the guarantor(s), jointly and severally, acknowledge and agree that VSBFA may set off, collect and retain any payments or monies due or owing the borrower or any guarantor from the Commonwealth of Virginia, and/or any governmental authority or agency of the Commonwealth. VSBFA submits collections to the Office of the Attorney General, Division of Debt Collection for legal action and collection of debt. As of June 30, 2019, the loan guaranty program has guarantees outstanding of $6.7 million and restricted assets pledged as collateral of $10.2 million.

GASB Statement No. 70, Accounting and Financial Reporting for Nonexchange Financial Guarantees, requires that certain information be disclosed regarding selected nonexchange financial guarantees. As of June 30, 2019, the VSBFA recognized a nonexchange financial guarantee liability of $133,677. This is a decrease of $9,610 from the beginning balance of $143,287. There were no required payments made during fiscal year 2019. Additionally, there have been no cumulative amounts paid on these outstanding loan guarantees nor are there any expected recoveries.

F. Regional Wet Weather Management Plan

Hampton Roads Sanitation District (HRSD) (nonmajor component unit) is party to a federal consent decree with the federal and state governments (the Consent Decree), which requires the HRSD to evaluate the wet weather capacity of the regional sewer system, including collection systems owned by 14 of the localities which the HRSD serves in the Hampton Roads area. Based upon that evaluation, the HRSD, in consultation with the localities, is required to develop a regional wet weather management plan (RWWMP) for submittal to the federal and state environmental agencies for their approval.

The HRSD and the localities believe that addressing wet weather capacity issues from a regional perspective will result in the most affordable and cost-effective approach for rate payers throughout the region. Toward that end, the HRSD and the localities entered into a legally binding Memorandum of Agreement in March of 2014 (the MOA). The MOA commits HRSD to (1) develop the RWWMP in consultation with the localities, (2) fund the approved plan through a regional rate imposed on all regional ratepayers, (3) design and construct the necessary
improvements, and (4) assume responsibility for wet weather capacity throughout the region in each area once the RWWMP is implemented. In exchange, the localities have agreed to (1) cooperate with the HRSD, (2) facilitate the construction of and accept ownership of any improvements which the HRSD may need to construct in the localities’ systems, and (3) maintain the integrity of their systems to industry standards. The Consent Decree and MOA also contemplate that the localities’ obligation to maintain the integrity of their sewer systems to industry standards was embodied in a State administrative order. While the HRSD is preparing the RWWMP, the Consent Decree also requires the HRSD to implement approximately $200.0 million in priority capital system upgrade projects over a 10-year period, which is included in the capital improvement and expansion program. The HRSD is on schedule to complete these projects. The HRSD has a major capital improvement and expansion program funded through the issuance of debt and its own resources. As of June 30, 2019, the HRSD has outstanding commitments for contracts in progress of approximately $167.2 million.

41. PENDING GOVERNMENTAL ACCOUNTING STANDARDS BOARD STATEMENT

The GASB has issued Statement No. 84, Fiduciary Activities, and Statement No. 87, Leases. GASB Statement No. 84 will modify the presentation of fiduciary funds and the related disclosures when implemented in fiscal year 2020. GASB Statement No. 87 will redefine leases and significantly impact the Commonwealth’s reporting disclosures when implemented in fiscal year 2021.

42. SUBSEQUENT EVENTS

Primary Government

Debt

On August 14, 2019, the Commonwealth of Virginia issued $54.3 million of General Obligation Bonds, Series 2019A, $93.8 million of General Obligation Refunding Bonds, Series 2019B, and $10.5 million of General Obligation Refunding Bonds, Series 2019C (Federally Taxable). The 2019A Bonds will provide funding for authorized 9(c) projects. The 2019B Bonds will refund certain maturities of its Series 2009C (9(b) projects) and 2009D (9(c) projects) Bonds. The 2019C Bonds will refund certain maturities of its Series 2009E-2 (9(b) projects) Bonds.

Other

The Virginia Retirement System (VRS) Board of Trustees modified the assumption for the investments long-term expected rate of return from 7.0 to 6.8 percent effective with the June 30, 2019, measurement date. This change is applicable to the VRS-sponsored pension and OPEB plans and will be applied to all periods of projected benefit payments to determine the total pension/OPEB liability in accordance with GASB Standards. This change will be reflected in the GASB Statement Nos. 68 and 75 data with the measurement date of June 30, 2019, and will be included in the Commonwealth’s fiscal year 2020 financial statements.

Component Units

Debt

On July 8, 2019, a local borrower prepaid an outstanding obligation with the Virginia Resources Authority (VRA) (major) in the amount of $19.0 million. The local obligation was funded from bond proceeds from the Virginia Pooled Financing Program (VPFP) Series 2011A and 2011B bonds. It is VRA’s intention to defease the related bonds with prepayment proceeds. On August 8, 2019, a local borrower prepaid an outstanding obligation with VRA in the amount of $4.7 million. The local obligation was funded from bond proceeds from the VPFP Series 2009A (ACE) bonds. It is VRA’s intention to defease the related bonds with prepayment proceeds. VRA issued revenue bonds in the amount of $93,890,000 dated August 14, 2019 through the VPFP. Interest rates range from 2.0 percent to 5.0 percent with a final maturity date of November 1, 2049.

On July 15, 2019, a Master Equipment Lease Agreement between Banc of America Public Capital Corp, as Lessor, and Virginia Port Authority (VPA) (nonmajor), as Lessee, was entered into for the lease purchase of terminal equipment totaling $22.0 million. The payments associated with this agreement begin January 1, 2020 in the amount of $882,587 and continue with semi-annual payments each July and January for a period of fifteen years at an interest rate of 2.5 percent. Final payment will be due July 1, 2034.

On August 21, 2019, the Virginia Housing Development Authority (VHDA) (major) issued $50.0 million of Rental Housing Bonds Series C-Taxable. On October 1, 2019, the VHDA redeemed $8.2 million and $18.7 million of Series 2010A and $9.6 million of Series 2012C-8 Commonwealth Mortgage Bonds. On October 16, 2019, the VHDA issued Rental Housing Bond 2019 Series D-Taxable in the amount of $50.0 million.

On September 5, 2019, the University of Virginia (UVA) (nonmajor) issued $350.0 million in General Revenue Pledge Bonds, Series 2019A. The proceeds will be used to fund capital projects at the University’s academic facilities and refund a portion of the outstanding principal balance of the University’s commercial paper notes. On September 10, 2019, UVA issued $150.0 million in General Revenue Pledge Bonds, Series 2019B. The proceeds will primarily be used to fund capital projects at the University’s medical center facilities and refund a portion of the outstanding principal balance of the University’s commercial paper notes. On September 10, 2019, UVA issued an additional $287.4 million in General Revenue Pledge Refunding Bonds, Series 2019C. The proceeds of the bonds will primarily be used to advance refund a portion of the University’s Series 2011, Series 2013A, and Series 2013B bonds originally issued to fund academic and medical center capital projects.
On October 24, 2019, Virginia Public School Authority (VPSA) (major) issued its Special Obligation School Financing Bonds, Montgomery County Series 2019 in the amount of $27.3 million. The Bonds will be used by the County to finance the costs of various school capital improvement projects.

On October 27, 2019, a Master Equipment Lease Agreement between Banc of America Capital Corporation as Lessor and VPA as Lessee was entered into for the lease purchase of terminal equipment totaling $15.1 million. The payments associated with this agreement begin July 1, 2020 in the amount of $842,192 and continue with semi-annual payments each January and July for a period of 10 years at an interest rate of 2.0 percent. Final payments will be due January 1, 2030.

On October 29, 2019, VPSA issued its Special Obligation School Financing Bonds, Prince William County Series 2019A in the amount of $109.2 million. The Bonds will be used by the County to finance the costs of various school capital improvement projects. In addition, VPSA issued its Special Obligation School Financing Refunding Bonds, Prince William County Series 2019B (Federally Taxable) in the amount of $34.6 million. The Bonds will be used by the County to refund certain maturities of Special Obligation School Financing Bond Series 2011, 2012 and 2013 issued by the VPSA for the benefit of the County for the initial financing of the costs of various school capital improvement projects.

On November 5, 2019, VHDA issued Commonwealth Mortgage Bonds Series 2019 A-Taxable in the amount of $106.5 million.

On November 12, 2019, VPSA issued $88.4 million of School Financing Bonds (1997 Resolution), Series 2019C and $22.3 million of School Financing Refunding Bonds (1997 Resolution), Series 2019D (Federally Taxable). The 2019C Bonds will be used to purchase certain general obligation local school bonds to finance capital projects for schools and the 2019D Bonds will be used to refund certain maturities of its Series 2013B Bonds.

On November 20, 2019, VRA issued revenue bonds through the VPFP in the amount of $383.6 million. Interest rates range from 1.8 percent to 5.0 percent with a final maturity date of November 1, 2049.

On December 1, 2019, VHDA redeemed $2.0 million of Series 2010B, $9.6 million of Series 2012C-8, and $19.8 million of Series 2010 B.

On December 4, 2019, the Virginia College Building Authority (VCBA) (major) issued $37.1 million in Educational Facilities Revenue Bonds, Series 2019A under the Public Higher Education Financing Program (the “Pool Program”). VCBA will use the proceeds of the Bonds to acquire Institutional Notes from participating public institutions of higher education. Each participating Institution will use the proceeds of its Institutional Note to finance capital projects approved by the General Assembly.

On December 5, 2019, VCBA issued $134.9 million in Educational Facilities Revenue Bonds (21st Century College and Equipment Programs), Series 2019B and $229.1 million in Educational Facilities Revenue Refunding Bonds (21st Century College and Equipment Programs), Series 2019C. The 2019B Bonds will provide funding for authorized VCBA capital projects at public institutions of higher education around the Commonwealth. The 2019C Bonds will refund certain maturities of VCBA's Series 2009F-2 Build America Bonds.

Other

Effective July 10, 2019, Jefferson College of Health Sciences, a division of Carilion Clinic, merged with Radford University (nonmajor) resulting in the formation of Radford University Carilion.

In September 2019, the Virginia Commonwealth University Health System Authority (Authority) (a blended component unit of the Virginia Commonwealth University – nonmajor component unit) committed to a majority sale of Virginia Premier to Optima, a wholly owned subsidiary of Sentara Healthcare. The transaction is expected to close by spring of 2020.
### Schedule of Revenues, Expenditures, and Changes in Fund Balances – Budget and Actual – General and Major Special Revenue Funds

**Fiscal Year Ended June 30, 2019**

(Dollars in Thousands)

<table>
<thead>
<tr>
<th></th>
<th>Original Budget</th>
<th>Final Budget</th>
<th>Actual</th>
<th>Final/Actual Variance Positive (Negative)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Fund</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Revenues:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Taxes:</strong></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Individual and Fiduciary Income</td>
<td>14,183,800</td>
<td>14,421,600</td>
<td>15,226,471</td>
<td>$ 804,871</td>
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<tr>
<td>Sales and Use</td>
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<td>3,981,000</td>
<td>3,973,011</td>
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<tr>
<td>Corporation Income</td>
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<td>1,012,200</td>
<td>943,391</td>
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<tr>
<td>Motor Fuel</td>
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</tr>
<tr>
<td>Motor Vehicle Sales and Use</td>
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</tr>
<tr>
<td>Communications Sales and Use</td>
<td>396,500</td>
<td>368,000</td>
<td>361,023</td>
<td>(6,977)</td>
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<tr>
<td>Deeds, Contracts, Willis, and Suits</td>
<td>407,200</td>
<td>377,275</td>
<td>394,062</td>
<td>16,787</td>
</tr>
<tr>
<td>Premiums of Insurance Companies</td>
<td>376,600</td>
<td>395,300</td>
<td>382,018</td>
<td>(13,282)</td>
</tr>
<tr>
<td>Alcoholic Beverage Sales</td>
<td>239,800</td>
<td>240,000</td>
<td>240,776</td>
<td>767</td>
</tr>
<tr>
<td>Tobacco Products</td>
<td>166,400</td>
<td>147,200</td>
<td>151,289</td>
<td>4,089</td>
</tr>
<tr>
<td>Estate</td>
<td></td>
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</tr>
<tr>
<td>Rights and Privileges</td>
<td>85,117</td>
<td>87,804</td>
<td>93,225</td>
<td>5,421</td>
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<tr>
<td>Sales of Property and Commodities</td>
<td>32,478</td>
<td>32,007</td>
<td>25,021</td>
<td>(6,986)</td>
</tr>
<tr>
<td>Assessments and Receipts for Support of Special Services</td>
<td>4,540</td>
<td>4,900</td>
<td>5,808</td>
<td>908</td>
</tr>
<tr>
<td>Institutional Revenue</td>
<td>41,735</td>
<td>43,525</td>
<td>37,937</td>
<td>(5,588)</td>
</tr>
<tr>
<td>Interest, Dividends, and Rents</td>
<td>67,801</td>
<td>70,443</td>
<td>103,670</td>
<td>33,227</td>
</tr>
<tr>
<td>Fines, Forfeitures, Court Fees, Penalties, and Escheats</td>
<td>216,205</td>
<td>213,709</td>
<td>224,783</td>
<td>11,074</td>
</tr>
<tr>
<td>Federal Grants and Contracts</td>
<td>10,431</td>
<td>10,431</td>
<td>10,573</td>
<td>142</td>
</tr>
<tr>
<td>Receipts from Cities, Counties, and Towns</td>
<td>11,158</td>
<td>11,497</td>
<td>11,216</td>
<td>(281)</td>
</tr>
<tr>
<td>Private Donations, Gifts and Contracts</td>
<td>168</td>
<td>233</td>
<td>965</td>
<td>732</td>
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<tr>
<td>Tobacco Master Settlement</td>
<td>48,000</td>
<td>58,667</td>
<td>56,487</td>
<td>(2,180)</td>
</tr>
<tr>
<td>Other</td>
<td>262,348</td>
<td>192,019</td>
<td>203,490</td>
<td>11,921</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td>21,530,172</td>
<td>21,804,364</td>
<td>22,591,944</td>
<td>787,580</td>
</tr>
<tr>
<td><strong>Expenditures:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Current:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Government</td>
<td>2,574,740</td>
<td>2,591,762</td>
<td>2,446,484</td>
<td>145,278</td>
</tr>
<tr>
<td>Education</td>
<td>9,093,983</td>
<td>9,212,771</td>
<td>9,109,073</td>
<td>103,698</td>
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<tr>
<td>Transportation</td>
<td>59</td>
<td>256</td>
<td>203</td>
<td>53</td>
</tr>
<tr>
<td>Resources and Economic Development</td>
<td>488,891</td>
<td>518,788</td>
<td>432,029</td>
<td>86,739</td>
</tr>
<tr>
<td>Individual and Family Services</td>
<td>7,140,627</td>
<td>7,338,134</td>
<td>7,208,024</td>
<td>130,110</td>
</tr>
<tr>
<td>Administration of Justice</td>
<td>2,894,241</td>
<td>2,938,324</td>
<td>2,904,663</td>
<td>33,661</td>
</tr>
<tr>
<td>Capital Outlay</td>
<td>5,438</td>
<td>11,127</td>
<td>2,575</td>
<td>8,552</td>
</tr>
<tr>
<td><strong>Total Expenditures</strong></td>
<td>22,200,979</td>
<td>22,611,142</td>
<td>22,103,051</td>
<td>508,091</td>
</tr>
<tr>
<td><strong>Revenues Over (Under) Expenditures</strong></td>
<td>(670,807)</td>
<td>(806,778)</td>
<td>488,893</td>
<td>1,295,671</td>
</tr>
<tr>
<td><strong>Other Financing Sources (Uses):</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Transfers:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfers In</td>
<td>847,477</td>
<td>904,470</td>
<td>938,306</td>
<td>33,836</td>
</tr>
<tr>
<td>Transfers Out</td>
<td>(419,792)</td>
<td>(408,301)</td>
<td>(414,827)</td>
<td>(6,526)</td>
</tr>
<tr>
<td>Bonds Issued</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Premium on Debt Issuance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Other Financing Sources (Uses)</strong></td>
<td>427,685</td>
<td>496,169</td>
<td>523,479</td>
<td>27,319</td>
</tr>
<tr>
<td><strong>Revenues and Other Sources Over (Under)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Expenditures and Other Uses</strong></td>
<td>(243,122)</td>
<td>(310,609)</td>
<td>1,012,372</td>
<td>1,322,981</td>
</tr>
<tr>
<td><strong>Fund Balance, July 1</strong></td>
<td>1,786,964</td>
<td>1,786,964</td>
<td>1,786,964</td>
<td>—</td>
</tr>
<tr>
<td><strong>Fund Balance, June 30</strong></td>
<td>$ 1,543,842</td>
<td>$ 1,476,355</td>
<td>$ 2,799,336</td>
<td>$ 1,322,981</td>
</tr>
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See notes on page 199 in this section.
### Special Revenue Funds
#### Commonwealth Transportation Fund

<table>
<thead>
<tr>
<th>Description</th>
<th>Original Budget</th>
<th>Final Budget</th>
<th>Actual</th>
<th>Final/Actual Variance Positive (Negative)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>1,467,556</td>
<td>1,533,955</td>
<td>1,463,348</td>
<td>(70,607)</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>1,049,430</td>
<td>1,126,965</td>
<td>1,060,135</td>
<td>(66,830)</td>
</tr>
<tr>
<td></td>
<td>952,600</td>
<td>917,500</td>
<td>972,021</td>
<td>54,521</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
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<tr>
<td></td>
<td>48,300</td>
<td>43,600</td>
<td>47,771</td>
<td>4,171</td>
</tr>
<tr>
<td></td>
<td>168,655</td>
<td>168,655</td>
<td>168,654</td>
<td>(1)</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>48,500</td>
<td>49,567</td>
<td>132,852</td>
<td>83,285</td>
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<tr>
<td></td>
<td>1,203,511</td>
<td>676,972</td>
<td>738,886</td>
<td>61,914</td>
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<tr>
<td></td>
<td>556</td>
<td>556</td>
<td>4,031</td>
<td>3,475</td>
</tr>
<tr>
<td></td>
<td>14,204</td>
<td>17,224</td>
<td>20,157</td>
<td>2,933</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>10,845</td>
<td>9,686</td>
<td>75,514</td>
<td>65,828</td>
</tr>
<tr>
<td></td>
<td>14,042</td>
<td>14,460</td>
<td>23,438</td>
<td>9,978</td>
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<tr>
<td></td>
<td>1,110,695</td>
<td>669,946</td>
<td>1,050,583</td>
<td>380,637</td>
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<tr>
<td></td>
<td>152,324</td>
<td>152,195</td>
<td>296,461</td>
<td>144,266</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>25</td>
<td>6,651</td>
<td>6,628</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>1,319</td>
<td>195,029</td>
<td>151,742</td>
<td>(43,287)</td>
</tr>
<tr>
<td></td>
<td>6,242,562</td>
<td>5,576,335</td>
<td>6,212,244</td>
<td>635,909</td>
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<tr>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>84,882</td>
<td>156,582</td>
<td>78,668</td>
<td>77,914</td>
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<tr>
<td></td>
<td>2,370</td>
<td>2,370</td>
<td>2,313</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>6,517,501</td>
<td>7,461,018</td>
<td>5,383,394</td>
<td>2,077,624</td>
</tr>
<tr>
<td></td>
<td>25,769</td>
<td>26,109</td>
<td>19,585</td>
<td>6,524</td>
</tr>
<tr>
<td></td>
<td>—</td>
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<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>10,684</td>
<td>10,684</td>
<td>10,684</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>76,610</td>
<td>71,400</td>
<td>28,811</td>
<td>42,589</td>
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<tr>
<td></td>
<td>6,717,816</td>
<td>7,728,163</td>
<td>5,523,455</td>
<td>2,204,708</td>
</tr>
<tr>
<td></td>
<td>(475,254)</td>
<td>(2,151,828)</td>
<td>688,789</td>
<td>2,840,617</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>1,000</td>
<td>1,000</td>
<td>16,113</td>
<td>15,113</td>
</tr>
<tr>
<td></td>
<td>(419,135)</td>
<td>(470,382)</td>
<td>(447,081)</td>
<td>23,301</td>
</tr>
<tr>
<td></td>
<td>311,715</td>
<td>311,715</td>
<td>311,715</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>29,921</td>
<td>29,921</td>
<td>29,921</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>(76,499)</td>
<td>(127,746)</td>
<td>(89,332)</td>
<td>38,414</td>
</tr>
<tr>
<td></td>
<td>(551,753)</td>
<td>(2,279,574)</td>
<td>599,457</td>
<td>2,879,031</td>
</tr>
<tr>
<td></td>
<td>3,109,645</td>
<td>3,109,645</td>
<td>3,109,645</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>$ 2,557,892</td>
<td>$ 830,071</td>
<td>$ 3,709,102</td>
<td>$ 2,879,031</td>
</tr>
</tbody>
</table>

Continued on next page
## Schedule of Revenues, Expenditures, and Changes in Fund Balances – Budget and Actual – General and Major Special Revenue Funds (Continued from previous page)

Fiscal Year Ended June 30, 2019

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Special Revenue Funds</th>
<th>Federal Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Original Budget</td>
</tr>
<tr>
<td>Revenues:</td>
<td></td>
</tr>
<tr>
<td>Taxes:</td>
<td></td>
</tr>
<tr>
<td>Individual and Fiduciary Income</td>
<td>$ —</td>
</tr>
<tr>
<td>Sales and Use</td>
<td></td>
</tr>
<tr>
<td>Corporation Income</td>
<td></td>
</tr>
<tr>
<td>Motor Fuel</td>
<td></td>
</tr>
<tr>
<td>Motor Vehicle Sales and Use</td>
<td>—</td>
</tr>
<tr>
<td>Communications Sales and Use</td>
<td>—</td>
</tr>
<tr>
<td>Deeds, Contracts, Willis, and Suits</td>
<td>—</td>
</tr>
<tr>
<td>Premiums of Insurance Companies</td>
<td>—</td>
</tr>
<tr>
<td>Alcoholic Beverage Sales</td>
<td>—</td>
</tr>
<tr>
<td>Tobacco Products</td>
<td></td>
</tr>
<tr>
<td>Estate</td>
<td></td>
</tr>
<tr>
<td>Public Service Corporations</td>
<td>—</td>
</tr>
<tr>
<td>Other Taxes</td>
<td></td>
</tr>
<tr>
<td>Rights and Privileges</td>
<td></td>
</tr>
<tr>
<td>Sales of Property and Commodities</td>
<td>—</td>
</tr>
<tr>
<td>Assessments and Receipts for Support of Special Services</td>
<td>—</td>
</tr>
<tr>
<td>Institutional Revenue</td>
<td></td>
</tr>
<tr>
<td>Interest, Dividends, and Rents</td>
<td>2,349</td>
</tr>
<tr>
<td>Fines, Forfeitures, Court Fees, Penalties, and Escheats</td>
<td>1,955</td>
</tr>
<tr>
<td>Federal Grants and Contracts</td>
<td>9,692,664</td>
</tr>
<tr>
<td>Receipts from Cities, Counties, and Towns</td>
<td>—</td>
</tr>
<tr>
<td>Private Donations, Gifts and Contracts</td>
<td>—</td>
</tr>
<tr>
<td>Tobacco Master Settlement</td>
<td>—</td>
</tr>
<tr>
<td>Other</td>
<td>243,404</td>
</tr>
<tr>
<td>Total Revenues</td>
<td>9,940,372</td>
</tr>
<tr>
<td>Expenditures:</td>
<td></td>
</tr>
<tr>
<td>Current:</td>
<td></td>
</tr>
<tr>
<td>General Government</td>
<td>152,940</td>
</tr>
<tr>
<td>Education</td>
<td>1,127,476</td>
</tr>
<tr>
<td>Transportation</td>
<td>34,268</td>
</tr>
<tr>
<td>Resources and Economic Development</td>
<td>187,010</td>
</tr>
<tr>
<td>Individual and Family Services</td>
<td>8,284,141</td>
</tr>
<tr>
<td>Administration of Justice</td>
<td>88,869</td>
</tr>
<tr>
<td>Capital Outlay</td>
<td>65,688</td>
</tr>
<tr>
<td>Total Expenditures</td>
<td>9,940,372</td>
</tr>
<tr>
<td>Revenues Over (Under) Expenditures</td>
<td>—</td>
</tr>
<tr>
<td>Other Financing Sources (Uses):</td>
<td></td>
</tr>
<tr>
<td>Transfers:</td>
<td></td>
</tr>
<tr>
<td>Transfers In</td>
<td></td>
</tr>
<tr>
<td>Transfers Out</td>
<td></td>
</tr>
<tr>
<td>Bonds Issued</td>
<td></td>
</tr>
<tr>
<td>Premium on Debt Issuance</td>
<td></td>
</tr>
<tr>
<td>Total Other Financing Sources (Uses)</td>
<td>—</td>
</tr>
<tr>
<td>Revenues and Other Sources Over (Under) Expenditures and Other Uses</td>
<td>—</td>
</tr>
<tr>
<td>Fund Balance, July 1</td>
<td></td>
</tr>
<tr>
<td>Fund Balance, June 30</td>
<td>$ —</td>
</tr>
</tbody>
</table>

See notes on page 199 in this section.
Notes for Schedule of Revenues, Expenditures, and Changes in Fund Balances – Budget and Actual – General and Major Special Revenue Funds

1. Basis of Budgeting vs. Modified Accrual Basis Fund Balance (1)

Since the presentation of financial data on the basis of budgeting differs from that presented under accounting principles generally accepted in the United States of America, a schedule reconciling the fund balance on a budgetary basis at June 30, 2019, to the fund balance on a modified accrual basis follows.

<table>
<thead>
<tr>
<th>Fund Balance Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budgetary Basis to GAAP Basis</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(Dollars in Thousands)</th>
<th>General Fund</th>
<th>Commonwealth Transportation Fund</th>
<th>Federal Trust Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fund Balance, Basis of Budgeting</td>
<td>$ 2,799,336</td>
<td>$ 3,709,102</td>
<td>—</td>
</tr>
<tr>
<td>Adjustments from Budget to Modified Accrual:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Accrued Revenues:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taxes</td>
<td>744,886</td>
<td>143,327</td>
<td>—</td>
</tr>
<tr>
<td>Tax Refunds</td>
<td>(892,370)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Other Revenue/Other Sources</td>
<td>132,483</td>
<td>121,131</td>
<td>1,212,585</td>
</tr>
<tr>
<td>Deferral of Up-front SCA payment</td>
<td>—</td>
<td>(45,000)</td>
<td>—</td>
</tr>
<tr>
<td>Medicaid Payable</td>
<td>(469,505)</td>
<td>—</td>
<td>(963,696)</td>
</tr>
<tr>
<td>Net Accrued Expenditures/Other Uses</td>
<td>(712,157)</td>
<td>(467,049)</td>
<td>(121,214)</td>
</tr>
<tr>
<td>Fund Reclassification - Budget to Modified Accrual</td>
<td>—</td>
<td>(578,793)</td>
<td>—</td>
</tr>
<tr>
<td>Fund Balance, Modified Accrual Basis</td>
<td>$ 1,602,673</td>
<td>$ 2,882,718</td>
<td>$ 127,675</td>
</tr>
</tbody>
</table>

1. As discussed in Note 1.E., the Literary Fund has no approved budget.

2. Appropriations

The amounts presented in the Schedule of Revenues, Expenditures, and Changes in Fund Balances – Budget and Actual – General and Major Special Revenue Funds are principally on a cash basis and represent the original budget adopted by the General Assembly and all supplemental appropriations and transfers. The following schedule reconciles original appropriations to the final adjusted expenditure appropriations for the General Fund and Major Special Revenue Funds, at June 30, 2019, except the Literary Fund which has no approved budget.

<table>
<thead>
<tr>
<th>(Dollars in Thousands)</th>
<th>General Fund (8)</th>
<th>Commonwealth Transportation Fund</th>
<th>Federal Trust Fund (9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriations (1)</td>
<td>$ 22,200,979</td>
<td>$ 6,717,816</td>
<td>$ 9,940,372</td>
</tr>
<tr>
<td>Supplemental Appropriations:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reappropriations (2)</td>
<td>105,191</td>
<td>91,390</td>
<td>72,307</td>
</tr>
<tr>
<td>Subsequent Executive (3)</td>
<td>181,386</td>
<td>340,287</td>
<td>112,405</td>
</tr>
<tr>
<td>Subsequent Legislative (4)</td>
<td>459,000</td>
<td>677,181</td>
<td>502,602</td>
</tr>
<tr>
<td>Capital Outlay and Operating Reversions (5)</td>
<td>(1,522)</td>
<td>(1)</td>
<td>(6,002)</td>
</tr>
<tr>
<td>Transfers (6)</td>
<td>(307,882)</td>
<td>(21,901)</td>
<td>(13,223)</td>
</tr>
<tr>
<td>Capital Outlay Adjustment (7)</td>
<td>(26,010)</td>
<td>(76,609)</td>
<td>(71,228)</td>
</tr>
<tr>
<td>Appropriations, as adjusted</td>
<td>$ 22,611,142</td>
<td>$ 7,728,163</td>
<td>$ 10,537,233</td>
</tr>
</tbody>
</table>

2. Actions taken to reappropriate any prior year unexpended balances per authority of the language in the Appropriation Act.
3. Actions taken by the Governor to carry forward any prior year unexpended balances, sum sufficient authority, and year 2 to year 1 reductions (General Fund) and actions taken to appropriate any additional revenues collected so that they can be legally spent (Special Revenue Funds).
4. Actions taken by the Governor and the General Assembly to adjust the budget.
5. Represents reversions of unexpended capital outlay and operating balances.
6. Represents transfers required by the Appropriation Act. Transfers out are reduced by approximately $1.7 billion (General Fund) and $10.9 million (Commonwealth Transportation Fund) for transfers to component units and fiduciary funds that have been reclassified as expenditures in accordance with GASB Statement No. 34.
7. Capital outlay appropriations cover the projects’ lives and usually extend beyond the current fiscal year. These amounts have been adjusted to report the amount authorized for expenditure during the current fiscal year.
8. Budgetary reductions totaling $354.2 million are excluded since they were not available for disbursement during the current fiscal year.
9. Appropriations do not include food stamp issuances of $1.0 billion since this is a noncash item; however, this amount is included in actual expenditures.
## Schedule of Changes in Employers' Net Pension Liability (1) (2)

### Fiscal Year Ended June 30, 2019

(Dollars in Thousands)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total pension liability:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service cost</td>
<td>$375,965</td>
<td>$370,235</td>
<td>$369,779</td>
<td>$375,149</td>
<td>$369,120</td>
</tr>
<tr>
<td>Interest</td>
<td>1,606,772</td>
<td>1,562,819</td>
<td>1,533,764</td>
<td>1,482,951</td>
<td>1,436,064</td>
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<tr>
<td>Benefit changes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference between actual and expected experience</td>
<td>(327,289)</td>
<td>(85,975)</td>
<td>(245,642)</td>
<td>59,923</td>
<td>—</td>
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<tr>
<td>Assumption changes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Benefit payments</td>
<td>(1,296,803)</td>
<td>(1,234,388)</td>
<td>(1,195,198)</td>
<td>(1,136,102)</td>
<td>(1,081,866)</td>
</tr>
<tr>
<td>Refunds of contributions</td>
<td>(30,236)</td>
<td>(30,837)</td>
<td>(25,240)</td>
<td>(27,724)</td>
<td>(25,036)</td>
</tr>
<tr>
<td>Net change in total pension liability</td>
<td>328,409</td>
<td>658,819</td>
<td>437,463</td>
<td>754,197</td>
<td>698,282</td>
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<td><strong>Total pension liability - beginning</strong></td>
<td>23,617,412</td>
<td>22,958,593</td>
<td>22,521,130</td>
<td>21,766,933</td>
<td>21,068,651</td>
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<td><strong>Total pension liability - ending (a)</strong></td>
<td>$23,945,821</td>
<td>$23,617,412</td>
<td>$22,958,593</td>
<td>$22,521,130</td>
<td>$21,766,933</td>
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</tbody>
</table>

### Plan fiduciary net position:

| Plan fiduciary net position:         |       |       |       |       |       |
| Contributions - employer            | $548,158 | $535,424 | $722,617 | $480,657 | $343,259 |
| Contributions - member              | 201,920 | 201,391 | 200,184 | 195,582 | 198,035 |
| Net investment income               | 1,302,241 | 1,963,811 | 277,166 | 728,083 | 2,243,999 |
| Benefit payments                    | (1,296,803) | (1,234,388) | (1,195,198) | (1,136,102) | (1,081,866) |
| Refunds of contributions            | (30,236) | (30,837) | (25,240) | (27,724) | (25,036) |
| Administrative expense              | (11,481) | (11,612) | (10,140) | (10,302) | (12,341) |
| Other                               | 28,502 | (1,743) | (122) | (154) | 123 |
| Net change in plan fiduciary net position | 742,301 | 1,422,046 | (30,733) | 230,040 | 1,666,173 |
| **Plan fiduciary net position - beginning** | 17,789,888 | 16,367,842 | 16,398,575 | 16,168,535 | 14,502,362 |
| **Plan fiduciary net position - ending (b)** | 18,532,189 | 17,789,888 | 16,367,842 | 16,398,575 | 16,168,535 |
| **Net pension liability - ending (a-b)** | $5,413,632 | $5,827,524 | $6,590,751 | $6,122,555 | $5,598,398 |

Plan fiduciary net position as a percentage of the total pension liability (b/a) 77.4% 75.3% 71.3% 72.8% 74.3%

Covered payroll (c) $4,152,368 $4,020,893 $3,977,759 $3,878,632 $3,861,712

Net pension liability as a percentage of covered payroll ((a-b)/c) 130.4% 144.9% 165.7% 157.9% 145.0%

---

**Notes:**


2. The Commonwealth’s fiscal year 2019 net pension liability measurement date is June 30, 2018, as reported in Note 17.

See notes on page 208 in this section.
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>$</td>
<td>$ 885,510</td>
<td>$ 830,475</td>
<td>$ 828,856</td>
<td>$ 828,901</td>
<td>$ 831,501</td>
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<tr>
<td></td>
<td>(440,308)</td>
<td>(642,745)</td>
<td>(391,881)</td>
<td>(212,089)</td>
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<td>218,559</td>
<td>—</td>
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<td>(2,241,927)</td>
<td>(2,147,781)</td>
<td>(2,081,069)</td>
<td>(1,980,353)</td>
<td>(1,874,636)</td>
</tr>
<tr>
<td></td>
<td>(40,578)</td>
<td>(39,521)</td>
<td>(35,067)</td>
<td>(36,058)</td>
<td>(36,103)</td>
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<td>1,262,035</td>
<td>1,235,194</td>
<td>1,251,904</td>
<td>1,434,539</td>
<td>1,643,550</td>
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<td>45,417,520</td>
<td>44,182,326</td>
<td>42,930,422</td>
<td>41,495,883</td>
<td>39,852,333</td>
</tr>
<tr>
<td></td>
<td>$ 46,679,555</td>
<td>$ 45,417,520</td>
<td>$ 44,182,326</td>
<td>$ 42,930,422</td>
<td>$ 41,495,883</td>
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<td>$ 1,292,988</td>
<td>$ 1,137,976</td>
<td>$ 1,062,338</td>
<td>$ 1,267,250</td>
<td>$ 853,634</td>
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<td>391,490</td>
<td>392,730</td>
<td>380,314</td>
<td>373,525</td>
<td>371,241</td>
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<td>516,704</td>
<td>1,327,047</td>
<td>4,042,441</td>
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<td>(2,241,927)</td>
<td>(2,147,781)</td>
<td>(2,081,069)</td>
<td>(1,980,353)</td>
<td>(1,874,636)</td>
</tr>
<tr>
<td></td>
<td>(40,578)</td>
<td>(39,521)</td>
<td>(35,067)</td>
<td>(36,058)</td>
<td>(36,103)</td>
</tr>
<tr>
<td></td>
<td>(20,945)</td>
<td>(21,123)</td>
<td>(18,859)</td>
<td>(18,238)</td>
<td>(22,036)</td>
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<td>(2,167)</td>
<td>(3,238)</td>
<td>(222)</td>
<td>(284)</td>
<td>217</td>
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<td>1,800,018</td>
<td>2,951,334</td>
<td>(175,861)</td>
<td>932,889</td>
<td>3,334,758</td>
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<tr>
<td></td>
<td>33,119,545</td>
<td>30,168,211</td>
<td>30,344,072</td>
<td>29,411,183</td>
<td>26,076,425</td>
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<td>34,919,563</td>
<td>33,119,545</td>
<td>30,168,211</td>
<td>30,344,072</td>
<td>29,411,183</td>
</tr>
<tr>
<td></td>
<td>$ 11,759,992</td>
<td>$ 12,297,975</td>
<td>$ 14,014,115</td>
<td>$ 12,586,350</td>
<td>$ 12,084,700</td>
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<tr>
<td></td>
<td>74.8 %</td>
<td>72.9 %</td>
<td>68.3 %</td>
<td>70.7 %</td>
<td>70.9 %</td>
</tr>
<tr>
<td>$</td>
<td>$ 8,086,986</td>
<td>$ 7,891,783</td>
<td>$ 7,624,612</td>
<td>$ 7,434,932</td>
<td>$ 7,313,025</td>
</tr>
<tr>
<td></td>
<td>145.4 %</td>
<td>155.8 %</td>
<td>183.8 %</td>
<td>169.3 %</td>
<td>165.2 %</td>
</tr>
</tbody>
</table>

Continued on next page
### Schedule of Changes in Employers' Net Pension Liability (1) (2) (Continued from previous page)

Fiscal Year Ended June 30, 2019

(Dollars in Thousands)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
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<tbody>
<tr>
<td>Total pension liability:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service cost</td>
<td>$544,762</td>
<td>$541,594</td>
<td>$535,322</td>
<td>$530,945</td>
<td>$524,758</td>
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<td>Interest</td>
<td>1,472,680</td>
<td>1,422,753</td>
<td>1,362,892</td>
<td>1,309,484</td>
<td>1,243,386</td>
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<tr>
<td>Benefit changes</td>
<td>10,811</td>
<td>36,652</td>
<td>2,053</td>
<td>1,135</td>
<td>—</td>
</tr>
<tr>
<td>Difference between actual and expected experience</td>
<td>(43,177)</td>
<td>(205,649)</td>
<td>(87,268)</td>
<td>(185,419)</td>
<td>—</td>
</tr>
<tr>
<td>Assumption changes</td>
<td>—</td>
<td>(64,510)</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Benefit payments</td>
<td>(1,010,021)</td>
<td>(941,856)</td>
<td>(893,585)</td>
<td>(819,201)</td>
<td>(754,706)</td>
</tr>
<tr>
<td>Refunds of contributions</td>
<td>(41,324)</td>
<td>(42,068)</td>
<td>(37,380)</td>
<td>(36,898)</td>
<td>(36,876)</td>
</tr>
<tr>
<td>Net change in total pension liability</td>
<td>933,731</td>
<td>746,916</td>
<td>882,034</td>
<td>800,046</td>
<td>976,562</td>
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<tr>
<td>Total pension liability - beginning</td>
<td>21,564,004</td>
<td>20,817,088</td>
<td>19,935,054</td>
<td>19,135,008</td>
<td>18,158,446</td>
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<tr>
<td>Total pension liability - ending (a)</td>
<td>$22,497,735</td>
<td>$21,564,004</td>
<td>$20,817,088</td>
<td>$19,935,054</td>
<td>$19,135,008</td>
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### Plan fiduciary net position:

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Contributions - employer</td>
<td>$490,286</td>
<td>$477,563</td>
<td>$543,947</td>
<td>$533,877</td>
<td>$539,366</td>
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<tr>
<td>Contributions - member</td>
<td>241,339</td>
<td>238,636</td>
<td>231,934</td>
<td>227,060</td>
<td>225,555</td>
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<tr>
<td>Net investment income</td>
<td>1,415,456</td>
<td>2,113,973</td>
<td>300,995</td>
<td>761,164</td>
<td>2,272,284</td>
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<tr>
<td>Benefit payments</td>
<td>(1,010,021)</td>
<td>(941,856)</td>
<td>(893,585)</td>
<td>(819,201)</td>
<td>(754,706)</td>
</tr>
<tr>
<td>Refunds of contributions</td>
<td>(41,324)</td>
<td>(42,068)</td>
<td>(37,380)</td>
<td>(36,898)</td>
<td>(36,876)</td>
</tr>
<tr>
<td>Administrative expense</td>
<td>(12,236)</td>
<td>(12,220)</td>
<td>(10,696)</td>
<td>(10,358)</td>
<td>(12,153)</td>
</tr>
<tr>
<td>Other</td>
<td>(30,924)</td>
<td>(1,887)</td>
<td>(130)</td>
<td>(162)</td>
<td>120</td>
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<tr>
<td>Net change in plan fiduciary net position</td>
<td>1,052,576</td>
<td>1,832,141</td>
<td>135,085</td>
<td>655,482</td>
<td>2,233,590</td>
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<tr>
<td>Plan fiduciary net position - beginning</td>
<td>19,250,247</td>
<td>17,418,106</td>
<td>17,283,021</td>
<td>16,627,539</td>
<td>14,393,949</td>
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<td>Plan fiduciary net position - ending (b)</td>
<td>20,302,823</td>
<td>19,250,247</td>
<td>17,418,106</td>
<td>17,283,021</td>
<td>16,627,539</td>
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<tr>
<td>Net pension liability - ending (a-b)</td>
<td>$2,194,912</td>
<td>$2,313,757</td>
<td>$3,398,982</td>
<td>$2,652,033</td>
<td>$2,507,469</td>
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Plan fiduciary net position as a percentage of the total pension liability (b/a):

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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Covered payroll (c)</td>
<td>$4,932,344</td>
<td>$4,765,842</td>
<td>$4,628,806</td>
<td>$4,513,335</td>
<td>$4,434,764</td>
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</tbody>
</table>

Net pension liability as a percentage of covered payroll ((a-b)/c):

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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>44.5%</td>
<td>48.5%</td>
<td>73.4%</td>
<td>58.8%</td>
<td>56.5%</td>
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</tbody>
</table>
### SPORS

<table>
<thead>
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</thead>
<tbody>
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<td>$18,187</td>
<td>$18,880</td>
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<td>71,251</td>
<td>74,042</td>
<td>72,618</td>
<td>70,350</td>
<td>67,978</td>
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<tr>
<td></td>
<td>(7,248)</td>
<td>(5,327)</td>
<td>(14,711)</td>
<td>(2,890)</td>
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<td>(68,707)</td>
<td>—</td>
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<tr>
<td></td>
<td>(58,197)</td>
<td>(57,814)</td>
<td>(53,515)</td>
<td>(53,338)</td>
<td>(50,467)</td>
</tr>
<tr>
<td></td>
<td>(867)</td>
<td>(630)</td>
<td>(584)</td>
<td>(375)</td>
<td>(685)</td>
</tr>
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<td></td>
<td>23,126</td>
<td>(39,556)</td>
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<td>35,167</td>
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<td>1,064,450</td>
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<td>996,689</td>
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<td>$1,070,528</td>
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<td>$1,086,958</td>
<td>$1,064,450</td>
<td>$1,031,856</td>
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<td>87,265</td>
<td>12,634</td>
<td>32,466</td>
<td>98,682</td>
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<td>(58,197)</td>
<td>(57,814)</td>
<td>(53,515)</td>
<td>(53,338)</td>
<td>(50,467)</td>
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<td>(867)</td>
<td>(630)</td>
<td>(584)</td>
<td>(375)</td>
<td>(685)</td>
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<td>(590)</td>
<td>(471)</td>
<td>(431)</td>
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<td>(63)</td>
<td>(99)</td>
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<td>95,428</td>
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<td>730,688</td>
<td>733,352</td>
<td>720,990</td>
<td>625,562</td>
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<td>836,702</td>
<td>796,073</td>
<td>730,688</td>
<td>733,352</td>
<td>720,990</td>
</tr>
<tr>
<td></td>
<td>$233,826</td>
<td>$251,329</td>
<td>$356,270</td>
<td>$331,098</td>
<td>$310,866</td>
</tr>
<tr>
<td></td>
<td>78.2 %</td>
<td>76.0 %</td>
<td>67.2 %</td>
<td>68.9 %</td>
<td>69.9 %</td>
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<td>$124,003</td>
<td>$111,395</td>
<td>$114,395</td>
<td>$110,059</td>
<td>$112,010</td>
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<tr>
<td></td>
<td>188.6 %</td>
<td>225.6 %</td>
<td>311.4 %</td>
<td>300.8 %</td>
<td>277.5 %</td>
</tr>
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Continued on next page
### Schedule of Changes in Employers' Net Pension Liability (1) (2)

**Fiscal Year Ended June 30, 2019**

(Dollars in Thousands)

<table>
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<th></th>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
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<td><strong>Total pension liability:</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Service cost</td>
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<td>$47,189</td>
<td>$45,608</td>
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<td>Interest</td>
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<td>$135,453</td>
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<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Difference between actual and expected experience</td>
<td>(26,111)</td>
<td>(1,457)</td>
<td>4,997</td>
<td>(4,849)</td>
<td>—</td>
</tr>
<tr>
<td>Assumption changes</td>
<td>—</td>
<td>(63,457)</td>
<td>—</td>
<td>—</td>
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<tr>
<td>Benefit payments</td>
<td>(104,776)</td>
<td>(96,224)</td>
<td>(92,270)</td>
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<td>(78,412)</td>
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<td>Refunds of contributions</td>
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<td>(4,938)</td>
<td>(4,524)</td>
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<td>(4,665)</td>
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<td>Net change in total pension liability</td>
<td>44,977</td>
<td>16,566</td>
<td>83,567</td>
<td>77,474</td>
<td>82,467</td>
</tr>
<tr>
<td><strong>Total pension liability - beginning</strong></td>
<td>2,002,184</td>
<td>1,985,618</td>
<td>1,902,051</td>
<td>1,824,577</td>
<td>1,742,110</td>
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<tr>
<td><strong>Total pension liability - ending (a)</strong></td>
<td>$2,047,161</td>
<td>$2,002,184</td>
<td>$1,985,618</td>
<td>$1,902,051</td>
<td>$1,824,577</td>
</tr>
</tbody>
</table>

| Plan fiduciary net position:       |      |      |      |      |      |
| Contributions - employer          | $73,793 | $73,816 | $79,392 | $62,084 | $67,483 |
| Contributions - member            | 17,496 | 17,598 | 17,574 | 17,081 | 17,908 |
| Net investment income             | 98,292 | 146,039 | 20,899 | 52,312 | 156,786 |
| Benefit payments                  | (104,776) | (96,224) | (92,270) | (84,990) | (78,412) |
| Refunds of contributions          | (5,604) | (4,938) | (4,524) | (4,797) | (4,665) |
| Administrative expense            | (861) | (1,540) | (940) | (743) | (681) |
| Other                              | (247) | (310) | (38) | (44) | —     |
| Net change in plan fiduciary net position | 78,093 | 134,441 | 20,093 | 40,903 | 158,419 |
| **Plan fiduciary net position - beginning** | 1,345,887 | 1,211,446 | 1,191,353 | 1,150,450 | 992,031 |
| **Plan fiduciary net position - ending (b)** | 1,423,980 | 1,345,887 | 1,211,446 | 1,191,353 | 1,150,450 |
| **Net pension liability - ending (a-b)** | $623,181 | $656,297 | $774,172 | $710,698 | $674,127 |

| Covered payroll (c)               | $345,531 | $344,468 | $345,504 | $338,562 | $352,492 |
| Net pension liability as a percentage of covered payroll ((a-b)/c) | 180.4% | 190.5% | 224.1% | 209.9% | 191.2% |

Plan fiduciary net position as a percentage of the total pension liability (b/a) 69.6% 67.2% 61.0% 62.6% 63.1%
## JRS

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<td>—</td>
<td>—</td>
<td>(15,552)</td>
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<tr>
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<td>(15,786)</td>
<td>(14,774)</td>
<td>(18,681)</td>
<td>(9,107)</td>
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<tr>
<td>$</td>
<td>—</td>
<td>16,114</td>
<td>—</td>
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<tr>
<td>$</td>
<td>(41,165)</td>
<td>(40,895)</td>
<td>(41,341)</td>
<td>(40,205)</td>
<td>(37,984)</td>
</tr>
<tr>
<td>$</td>
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<td>—</td>
<td>—</td>
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</tr>
<tr>
<td>$</td>
<td>6,076</td>
<td>24,670</td>
<td>(10,776)</td>
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<td>646,275</td>
<td>621,605</td>
<td>632,381</td>
<td>616,680</td>
<td>590,627</td>
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<td>$646,275</td>
<td>$621,605</td>
<td>$632,381</td>
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</thead>
<tbody>
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<td>$27,612</td>
<td>$41,502</td>
<td>$31,503</td>
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<td>3,231</td>
<td>3,272</td>
<td>3,236</td>
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<tr>
<td>$</td>
<td>37,466</td>
<td>56,029</td>
<td>8,112</td>
<td>20,051</td>
<td>60,833</td>
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<tr>
<td>$</td>
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<td>(40,895)</td>
<td>(41,341)</td>
<td>(40,205)</td>
<td>(37,984)</td>
</tr>
<tr>
<td>$</td>
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<td>—</td>
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</tr>
<tr>
<td>$</td>
<td>(326)</td>
<td>(594)</td>
<td>(363)</td>
<td>(283)</td>
<td>(268)</td>
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<td>$</td>
<td>(42)</td>
<td>(64)</td>
<td>(15)</td>
<td>(17)</td>
<td>—</td>
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<tr>
<td>$</td>
<td>27,260</td>
<td>45,360</td>
<td>11,131</td>
<td>14,064</td>
<td>53,359</td>
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<td>$</td>
<td>512,749</td>
<td>467,389</td>
<td>456,258</td>
<td>442,194</td>
<td>388,835</td>
</tr>
<tr>
<td>$</td>
<td>540,009</td>
<td>512,749</td>
<td>467,389</td>
<td>456,258</td>
<td>442,194</td>
</tr>
<tr>
<td>$</td>
<td>112,342</td>
<td>$133,526</td>
<td>$154,216</td>
<td>$176,123</td>
<td>$174,486</td>
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</table>

|       | 82.8%   | 79.3%   | 75.2%   | 72.1%   | 71.7%   |

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<th>$66,826</th>
<th>$66,621</th>
<th>$61,092</th>
<th>$61,020</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>164.6%</td>
<td>199.8%</td>
<td>231.5%</td>
<td>288.3%</td>
<td>285.9%</td>
</tr>
<tr>
<td>Year Ended June 30</td>
<td>Actuarially Determined Contribution</td>
<td>Contributions in Relation to the Actuarially Determined Contribution</td>
<td>Contributions Deficiency (Excess)</td>
<td>Covered Payroll</td>
<td>Contributions as a Percentage of Covered Payroll</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------------------------</td>
<td>---------------------------------------------------------------</td>
<td>----------------------------------</td>
<td>----------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td><strong>VIRGINIA RETIREMENT SYSTEM (VRS) - STATE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>$567,450</td>
<td>$567,450</td>
<td>$4,197,484</td>
<td>13.52%</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>560,154</td>
<td>560,154</td>
<td>—</td>
<td>4,152,368</td>
<td>13.49%</td>
</tr>
<tr>
<td>2017</td>
<td>542,418</td>
<td>542,418</td>
<td>—</td>
<td>4,020,893</td>
<td>13.49%</td>
</tr>
<tr>
<td>2016</td>
<td>628,486</td>
<td>557,160</td>
<td>71,326</td>
<td>3,977,759</td>
<td>14.01%</td>
</tr>
<tr>
<td>2015</td>
<td>612,824</td>
<td>478,235</td>
<td>134,589</td>
<td>3,878,632</td>
<td>12.33%</td>
</tr>
<tr>
<td>2014</td>
<td>504,726</td>
<td>338,286</td>
<td>166,440</td>
<td>3,861,712</td>
<td>8.76%</td>
</tr>
<tr>
<td>2013</td>
<td>485,577</td>
<td>325,452</td>
<td>160,125</td>
<td>3,715,205</td>
<td>8.76%</td>
</tr>
<tr>
<td>2012</td>
<td>309,930</td>
<td>117,696</td>
<td>192,234</td>
<td>3,663,475</td>
<td>3.21%</td>
</tr>
<tr>
<td>2011</td>
<td>294,363</td>
<td>74,113</td>
<td>220,250</td>
<td>3,479,484</td>
<td>2.13%</td>
</tr>
<tr>
<td>2010</td>
<td>285,209</td>
<td>176,751</td>
<td>108,458</td>
<td>3,556,222</td>
<td>4.97%</td>
</tr>
</tbody>
</table>

| **VIRGINIA RETIREMENT SYSTEM (VRS) - TEACHER** | | | | | |
| 2019 | $1,315,160 | $1,315,160 | — | $8,387,503 | 15.68% |
| 2018 | 1,319,796 | 1,319,796 | — | 8,086,986 | 16.32% |
| 2017 | 1,287,939 | 1,156,935 | 131,004 | 7,891,783 | 14.66% |
| 2016 | 1,344,981 | 1,072,020 | 272,961 | 7,624,612 | 14.06% |
| 2015 | 1,353,158 | 1,078,065 | 275,093 | 7,434,932 | 14.50% |
| 2014 | 1,226,394 | 852,699 | 373,695 | 7,313,025 | 11.66% |
| 2013 | 1,203,856 | 837,028 | 366,828 | 7,178,629 | 11.66% |
| 2012 | 903,655 | 443,078 | 460,577 | 6,999,653 | 6.33% |
| 2011 | 891,237 | 271,306 | 619,931 | 6,903,465 | 3.93% |
| 2010 | 839,550 | 450,218 | 389,332 | 7,090,791 | 6.35% |

| **VIRGINIA RETIREMENT SYSTEM (VRS) - POLITICAL SUBDIVISIONS** | | | | | |
| 2019 | $515,904 | $518,513 | (2,609) | $5,118,622 | 10.13% |
| 2018 | 504,955 | 505,603 | (648) | 4,932,344 | 10.25% |
| 2017 | 487,067 | 487,702 | (635) | 4,765,842 | 10.23% |
| 2016 | 554,335 | 549,408 | 4,927 | 4,628,806 | 11.87% |
| 2015 | 540,859 | 535,919 | 4,940 | 4,513,335 | 11.87% |
| 2014 | 551,822 | 539,131 | 12,691 | 4,434,764 | 12.16% |
| 2013 | 537,657 | 525,385 | 12,272 | 4,321,565 | 12.16% |
| 2012 | 400,879 | 400,879 | — | 4,142,150 | 9.68% |
| 2011 | 391,531 | 391,531 | — | 4,078,580 | 9.60% |
| 2010 | 363,982 | 363,982 | — | 4,125,087 | 8.82% |

See notes on page 208 in this section.
<table>
<thead>
<tr>
<th>Year Ended June 30</th>
<th>Actuarially Determined Contribution</th>
<th>Contributions in Relation to the Actuarially Determined Contribution</th>
<th>Contributions Deficiency (Excess)</th>
<th>Covered Payroll</th>
<th>Contributions as a Percentage of Covered Payroll</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STATE POLICE OFFICERS' RETIREMENT SYSTEM (SPORS)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>$31,469</td>
<td>$31,469</td>
<td>$</td>
<td>126,483</td>
<td>24.88%</td>
</tr>
<tr>
<td>2018</td>
<td>35,391</td>
<td>35,391</td>
<td>—</td>
<td>124,003</td>
<td>28.54%</td>
</tr>
<tr>
<td>2017</td>
<td>31,792</td>
<td>31,792</td>
<td>—</td>
<td>111,395</td>
<td>28.54%</td>
</tr>
<tr>
<td>2016</td>
<td>35,211</td>
<td>31,561</td>
<td>3,650</td>
<td>114,395</td>
<td>27.99%</td>
</tr>
<tr>
<td>2015</td>
<td>33,876</td>
<td>28,417</td>
<td>5,459</td>
<td>110,059</td>
<td>25.82%</td>
</tr>
<tr>
<td>2014</td>
<td>36,538</td>
<td>27,711</td>
<td>8,827</td>
<td>112,010</td>
<td>24.74%</td>
</tr>
<tr>
<td>2013</td>
<td>34,535</td>
<td>26,193</td>
<td>8,342</td>
<td>105,872</td>
<td>24.74%</td>
</tr>
<tr>
<td>2012</td>
<td>26,250</td>
<td>11,441</td>
<td>14,809</td>
<td>102,701</td>
<td>11.14%</td>
</tr>
<tr>
<td>2011</td>
<td>24,570</td>
<td>7,460</td>
<td>17,110</td>
<td>96,128</td>
<td>7.76%</td>
</tr>
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<td>2010</td>
<td>23,791</td>
<td>15,714</td>
<td>8,077</td>
<td>98,757</td>
<td>15.91%</td>
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<td><strong>VIRGINIA LAW OFFICERS' RETIREMENT SYSTEM (VaLORS)</strong></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>2019</td>
<td>$75,635</td>
<td>$75,635</td>
<td>$</td>
<td>349,998</td>
<td>21.61%</td>
</tr>
<tr>
<td>2018</td>
<td>72,734</td>
<td>72,734</td>
<td>—</td>
<td>345,531</td>
<td>21.05%</td>
</tr>
<tr>
<td>2017</td>
<td>72,511</td>
<td>72,511</td>
<td>—</td>
<td>344,468</td>
<td>21.05%</td>
</tr>
<tr>
<td>2016</td>
<td>72,763</td>
<td>65,101</td>
<td>7,662</td>
<td>345,504</td>
<td>18.84%</td>
</tr>
<tr>
<td>2015</td>
<td>71,301</td>
<td>59,824</td>
<td>11,477</td>
<td>338,562</td>
<td>17.67%</td>
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<tr>
<td>2014</td>
<td>68,806</td>
<td>52,169</td>
<td>16,637</td>
<td>352,492</td>
<td>14.80%</td>
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<tr>
<td>2013</td>
<td>66,463</td>
<td>50,392</td>
<td>16,071</td>
<td>340,489</td>
<td>14.80%</td>
</tr>
<tr>
<td>2012</td>
<td>55,306</td>
<td>24,481</td>
<td>30,825</td>
<td>347,181</td>
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<td>2011</td>
<td>53,686</td>
<td>17,255</td>
<td>36,431</td>
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<td>2010</td>
<td>57,894</td>
<td>39,027</td>
<td>18,867</td>
<td>345,020</td>
<td>11.31%</td>
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<td><strong>JUDICIAL RETIREMENT SYSTEM (JRS)</strong></td>
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<td></td>
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</tr>
<tr>
<td>2019</td>
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<td>$23,498</td>
<td>$</td>
<td>68,330</td>
<td>34.39%</td>
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<tr>
<td>2018</td>
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<td>28,642</td>
<td>—</td>
<td>68,245</td>
<td>41.97%</td>
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<tr>
<td>2017</td>
<td>28,047</td>
<td>28,047</td>
<td>—</td>
<td>66,826</td>
<td>41.97%</td>
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<td>2016</td>
<td>37,008</td>
<td>33,291</td>
<td>3,717</td>
<td>66,621</td>
<td>49.97%</td>
</tr>
<tr>
<td>2015</td>
<td>35,336</td>
<td>31,560</td>
<td>3,776</td>
<td>61,092</td>
<td>51.66%</td>
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<tr>
<td>2014</td>
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<td>27,728</td>
<td>5,290</td>
<td>61,020</td>
<td>45.44%</td>
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<td>2013</td>
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<td>27,028</td>
<td>5,157</td>
<td>59,481</td>
<td>45.44%</td>
</tr>
<tr>
<td>2012</td>
<td>27,631</td>
<td>18,907</td>
<td>8,724</td>
<td>59,053</td>
<td>32.02%</td>
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<tr>
<td>2011</td>
<td>28,101</td>
<td>17,303</td>
<td>10,798</td>
<td>60,058</td>
<td>28.81%</td>
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<tr>
<td>2010</td>
<td>23,638</td>
<td>17,065</td>
<td>6,573</td>
<td>62,139</td>
<td>27.46%</td>
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### Notes for Pension Schedules

<table>
<thead>
<tr>
<th>VRS</th>
<th>State</th>
<th>Teacher</th>
<th>Political Subdivisions</th>
<th>SPORS</th>
<th>VaLORS</th>
<th>JRS</th>
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<td>Valuation Date</td>
<td>June 30, 2018</td>
<td>June 30, 2018</td>
<td>June 30, 2018</td>
<td>June 30, 2018</td>
<td>June 30, 2018</td>
<td>June 30, 2018</td>
</tr>
<tr>
<td>Actuarial Cost Method</td>
<td>Entry Age Normal</td>
<td>Entry Age Normal</td>
<td>Entry Age Normal</td>
<td>Entry Age Normal</td>
<td>Entry Age Normal</td>
<td>Entry Age Normal</td>
</tr>
</tbody>
</table>

**Actuarial Assumptions:**

- **Investment Rate of Return**: 7.00% 7.00% 7.00% 7.00% 7.00% 7.00%
- **Projected Salary Increases:**
  - **State Employees/Teachers**: 3.50% to 5.35% 3.50% to 5.95% N/A 3.50% to 4.75% 3.50% to 4.75% 4.50%
  - **Political Subdivision - Non-Hazardous Duty Employees**: N/A N/A 3.50% to 5.35% N/A N/A N/A
  - **Political Subdivision - Hazardous Duty Employees**: N/A N/A 3.50% to 4.75% N/A N/A N/A

**Post-Retirement Benefits Increases**

- **Plan 1**: 2.50% 2.50% 2.50% 2.50% 2.50% 2.50%
- **Plan 2**: 2.25% 2.25% 2.25% 2.25% 2.25% 2.25%
- **Hybrid**: 2.25% 2.25% 2.25% 2.25% 2.25% 2.25%

* Includes inflation at 2.50%.
** Compounded annually.

As discussed in Note 17, visit the Virginia Retirement System’s website at [www.varetire.org](http://www.varetire.org) to obtain a copy of the separately issued financial statements.
Schedule of Changes in Employers’ Net Other Postemployment Benefit Liability (Asset) (1) (2)

Fiscal Year Ended June 30, 2019

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Change in the Net OPEB Liability</th>
<th>RHIC</th>
<th>VSDP</th>
</tr>
</thead>
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<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td><strong>Total OPEB liability:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service cost</td>
<td>$ 19,645</td>
<td>$ 19,231</td>
</tr>
<tr>
<td>Interest</td>
<td>66,883</td>
<td>66,641</td>
</tr>
<tr>
<td>Benefit changes</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Difference between actual and expected experience</td>
<td>745</td>
<td>—</td>
</tr>
<tr>
<td>Assumption changes</td>
<td>—</td>
<td>(12,229)</td>
</tr>
<tr>
<td>Benefit payments</td>
<td>(69,117)</td>
<td>(71,256)</td>
</tr>
<tr>
<td>Refunds of contributions</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Net change in total OPEB liability</td>
<td>18,156</td>
<td>2,387</td>
</tr>
<tr>
<td><strong>Total OPEB liability - beginning</strong></td>
<td>990,028</td>
<td>987,641</td>
</tr>
<tr>
<td><strong>Total OPEB liability - ending (a)</strong></td>
<td>$ 1,008,184</td>
<td>$ 990,028</td>
</tr>
<tr>
<td><strong>Plan fiduciary net position:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contributions - employer</td>
<td>$ 79,416</td>
<td>$ 75,058</td>
</tr>
<tr>
<td>Contributions - member</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Net investment income</td>
<td>5,706</td>
<td>7,706</td>
</tr>
<tr>
<td>Benefit payments</td>
<td>(69,117)</td>
<td>(71,256)</td>
</tr>
<tr>
<td>Third-party administrator charges</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Administrative expense</td>
<td>(149)</td>
<td>(131)</td>
</tr>
<tr>
<td>Other</td>
<td>536</td>
<td>(546)</td>
</tr>
<tr>
<td>Net change in plan fiduciary net position</td>
<td>16,392</td>
<td>10,831</td>
</tr>
<tr>
<td><strong>Plan fiduciary net position - beginning</strong></td>
<td>79,516</td>
<td>68,685</td>
</tr>
<tr>
<td><strong>Plan fiduciary net position - ending (b)</strong></td>
<td>95,908</td>
<td>79,516</td>
</tr>
<tr>
<td><strong>Net OPEB liability (asset) - ending (a-b)</strong></td>
<td>$ 912,276</td>
<td>$ 910,512</td>
</tr>
<tr>
<td>Plan fiduciary net position as a percentage of the total OPEB liability (b/a)</td>
<td>9.5%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Covered payroll (c)</td>
<td>$ 6,762,917</td>
<td>$ 6,489,069</td>
</tr>
<tr>
<td>Net OPEB liability (asset) as a percentage of covered payroll ((a-b)/c)</td>
<td>13.5%</td>
<td>14.0%</td>
</tr>
</tbody>
</table>

(1) The Commonwealth implemented GASB Statement No. 75, Accounting and Financial Reporting for Other Postemployment Benefits, as amended by GASB Statement No. 85, Omnibus 2017, effective for fiscal year 2018, therefore, ten years of data is unavailable.

(2) The Commonwealth’s fiscal year 2019 net OPEB liability measurement date is June 30, 2018, as reported in Note 19.

See notes on page 214 in this section.
Schedule of the Commonwealth's Proportionate Share of the Net Other Postemployment Benefit Liability (1) (2)

Fiscal Year Ended June 30, 2019

(Dollars in Thousands)

<table>
<thead>
<tr>
<th></th>
<th>GLI 2019</th>
<th>GLI 2018</th>
<th>LODA 2019</th>
<th>LODA 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commonwealth's proportion of the net OPEB liability</td>
<td>30.5%</td>
<td>30.3%</td>
<td>59.9%</td>
<td>60.9%</td>
</tr>
<tr>
<td>Commonwealth's proportionate share of the net OPEB liability</td>
<td>$463,787</td>
<td>$456,387</td>
<td>$187,869</td>
<td>$160,064</td>
</tr>
<tr>
<td>Commonwealth's covered payroll</td>
<td>$5,836,331</td>
<td>$5,621,670</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Commonwealth's covered employee payroll</td>
<td>N/A</td>
<td>N/A</td>
<td>$440,535</td>
<td>$431,978</td>
</tr>
<tr>
<td>Commonwealth's proportionate share of the net OPEB liability as a percentage of its covered payroll / covered employee payroll</td>
<td>7.9%</td>
<td>8.1%</td>
<td>42.6%</td>
<td>37.1%</td>
</tr>
<tr>
<td>Plan fiduciary net position as a percentage of the total OPEB liability</td>
<td>51.2%</td>
<td>48.9%</td>
<td>0.6%</td>
<td>1.3%</td>
</tr>
</tbody>
</table>


(2) The Commonwealth's fiscal year 2019 net OPEB liability measurement date is June 30, 2018, as reported in Note 19.

(3) Since the Commonwealth is considered the governmental nonemployer contributing entity for the state-funded Retiree Health Insurance Credit for constitutional officers, social services employees and registrars (RHIC: Non-State), the covered payroll information is not applicable.

See notes on page 214 in this section.
### RHIC: Non-State (3)

<table>
<thead>
<tr>
<th></th>
<th>Constitutional Officers</th>
<th></th>
<th>Social Service Employees</th>
<th></th>
<th>Registrars</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
<td>2018</td>
<td>2019</td>
<td>2018</td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>$</td>
<td>26,351</td>
<td>$25,766</td>
<td>$12,903</td>
<td>$12,725</td>
<td>$499</td>
<td>$486</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>11.1%</td>
<td>8.6%</td>
<td>9.3%</td>
<td>7.9%</td>
<td>10.4%</td>
<td>6.5%</td>
<td></td>
</tr>
</tbody>
</table>

Commonwealth of Virginia
<table>
<thead>
<tr>
<th>Year Ended June 30</th>
<th>Actuarially Determined Contribution</th>
<th>Contributions in Relation to the Actuarially Determined Contribution</th>
<th>Contributions Deficiency (Excess)</th>
<th>Covered Payroll</th>
<th>Covered Employee Payroll</th>
<th>Contributions as a Percentage of Covered Payroll / Covered Employee Payroll</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>$80,084</td>
<td>$80,084 $ — $6,844,807</td>
<td>N/A</td>
<td>1.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>79,802</td>
<td>79,802 $ — $6,762,917</td>
<td>N/A</td>
<td>1.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>76,571</td>
<td>76,571 $ — $6,489,069</td>
<td>N/A</td>
<td>1.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>73,961</td>
<td>66,375 7,586 6,321,454</td>
<td>N/A</td>
<td>1.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>71,522</td>
<td>64,186 7,336 6,112,951</td>
<td>N/A</td>
<td>1.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>63,385</td>
<td>60,367 3,018 6,036,629</td>
<td>N/A</td>
<td>1.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>59,618</td>
<td>56,779 2,839 5,677,848</td>
<td>N/A</td>
<td>1.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>60,222</td>
<td>7,686 52,536 5,681,295</td>
<td>N/A</td>
<td>0.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>57,193</td>
<td>5,395 51,798 5,395,598</td>
<td>N/A</td>
<td>0.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>66,523</td>
<td>43,195 23,328 5,452,717</td>
<td>N/A</td>
<td>0.8%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**RETIREE HEALTH INSURANCE CREDIT**

<table>
<thead>
<tr>
<th>Year Ended June 30</th>
<th>Actuarially Determined Contribution</th>
<th>Contributions in Relation to the Actuarially Determined Contribution</th>
<th>Contributions Deficiency (Excess)</th>
<th>Covered Payroll</th>
<th>Covered Employee Payroll</th>
<th>Contributions as a Percentage of Covered Payroll / Covered Employee Payroll</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>$25,281</td>
<td>$25,281 $ — $4,077,627</td>
<td>N/A</td>
<td>0.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>26,219</td>
<td>26,219 $ — $3,972,637</td>
<td>N/A</td>
<td>0.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>25,077</td>
<td>25,077 $ — $3,799,590</td>
<td>N/A</td>
<td>0.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>27,187</td>
<td>24,580 2,607 3,724,248</td>
<td>N/A</td>
<td>0.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>26,244</td>
<td>23,728 2,516 3,595,080</td>
<td>N/A</td>
<td>0.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>20,610</td>
<td>16,701 3,909 3,553,444</td>
<td>N/A</td>
<td>0.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>21,032</td>
<td>17,043 3,989 3,626,208</td>
<td>N/A</td>
<td>0.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>30,285</td>
<td>1,096 29,189 4,037,955</td>
<td>N/A</td>
<td>0.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>28,646</td>
<td>— 28,646 3,819,462</td>
<td>N/A</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>76,530</td>
<td>30,861 45,669 3,904,606</td>
<td>N/A</td>
<td>0.8%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**VIRGINIA SICKNESS AND DISABILITY PROGRAM**

(Also referred to Disability Insurance Trust Fund)

<table>
<thead>
<tr>
<th>Year Ended June 30</th>
<th>Actuarially Determined Contribution</th>
<th>Contributions in Relation to the Actuarially Determined Contribution</th>
<th>Contributions Deficiency (Excess)</th>
<th>Covered Payroll</th>
<th>Covered Employee Payroll</th>
<th>Contributions as a Percentage of Covered Payroll / Covered Employee Payroll</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>$30,869</td>
<td>$30,869 $ — $5,936,396</td>
<td>N/A</td>
<td>0.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>30,349</td>
<td>30,349 $ — $5,836,331</td>
<td>N/A</td>
<td>0.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>29,089</td>
<td>29,089 $ — $5,621,670</td>
<td>N/A</td>
<td>0.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>29,358</td>
<td>26,588 2,770 5,539,210</td>
<td>N/A</td>
<td>0.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>28,487</td>
<td>25,799 2,688 5,374,853</td>
<td>N/A</td>
<td>0.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>28,248</td>
<td>25,583 2,665 5,329,884</td>
<td>N/A</td>
<td>0.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>27,002</td>
<td>24,455 2,547 5,094,773</td>
<td>N/A</td>
<td>0.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>22,039</td>
<td>15,527 6,512 5,008,786</td>
<td>N/A</td>
<td>0.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>21,052</td>
<td>13,397 7,655 4,784,622</td>
<td>N/A</td>
<td>0.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>17,496</td>
<td>9,899 7,597 4,859,947</td>
<td>N/A</td>
<td>0.2%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**GROUP LIFE INSURANCE (1)**

<table>
<thead>
<tr>
<th>Year Ended June 30</th>
<th>Actuarially Determined Contribution</th>
<th>Contributions in Relation to the Actuarially Determined Contribution</th>
<th>Contributions Deficiency (Excess)</th>
<th>Covered Payroll</th>
<th>Covered Employee Payroll</th>
<th>Contributions as a Percentage of Covered Payroll / Covered Employee Payroll</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>$30,869</td>
<td>$30,869 $ — $5,936,396</td>
<td>N/A</td>
<td>0.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>30,349</td>
<td>30,349 $ — $5,836,331</td>
<td>N/A</td>
<td>0.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>29,089</td>
<td>29,089 $ — $5,621,670</td>
<td>N/A</td>
<td>0.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>29,358</td>
<td>26,588 2,770 5,539,210</td>
<td>N/A</td>
<td>0.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>28,487</td>
<td>25,799 2,688 5,374,853</td>
<td>N/A</td>
<td>0.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>28,248</td>
<td>25,583 2,665 5,329,884</td>
<td>N/A</td>
<td>0.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>27,002</td>
<td>24,455 2,547 5,094,773</td>
<td>N/A</td>
<td>0.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>22,039</td>
<td>15,527 6,512 5,008,786</td>
<td>N/A</td>
<td>0.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>21,052</td>
<td>13,397 7,655 4,784,622</td>
<td>N/A</td>
<td>0.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>17,496</td>
<td>9,899 7,597 4,859,947</td>
<td>N/A</td>
<td>0.2%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) The Group Life Insurance and the Line of Duty Trust Fund (Line of Duty Act) are cost-sharing plans and amounts in this schedule are only for the Commonwealth and does not include other employers.

(2) Covered employee payroll is provided since the contributions are not based on a measure of pay. Ten years of data is not available for this plan.

(3) Although the Retiree Health Insurance Credit program for constitutional officers, social services employees, and registrars existed prior to fiscal year 2016, the program was funded in a different manner and the results do not provide comparability with the current presentations. Since the Commonwealth is considered the governmental nonemployer contributing entity, the column regarding covered payroll is not applicable.

See notes on page 214 in this section.
<table>
<thead>
<tr>
<th>Year Ended June 30</th>
<th>Actuarially Determined Contribution</th>
<th>Contributions in Relation to the Actuarially Determined Contribution</th>
<th>Contributions Deficiency (Excess)</th>
<th>Covered Payroll</th>
<th>Covered Employee Payroll</th>
<th>Contributions as a Percentage of Covered Employee Payroll</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ 14,486</td>
<td>$ 8,042</td>
<td>$ 6,444</td>
<td>N/A</td>
<td>$ 462,799</td>
<td>1.7%</td>
</tr>
<tr>
<td>2018</td>
<td>13,870</td>
<td>6,364</td>
<td>7,506</td>
<td>N/A</td>
<td>440,535</td>
<td>1.4%</td>
</tr>
<tr>
<td>2017</td>
<td>14,275</td>
<td>6,550</td>
<td>7,725</td>
<td>N/A</td>
<td>431,978</td>
<td>1.5%</td>
</tr>
<tr>
<td></td>
<td><strong>LINE OF DUTY TRUST FUND (1) (2)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>RETIREE HEALTH INSURANCE CREDIT: NON-STATE (3)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>For Constitutional Officers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>$ 2,593</td>
<td>$ 2,593</td>
<td>—</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2018</td>
<td>2,362</td>
<td>2,362</td>
<td>—</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2017</td>
<td>2,280</td>
<td>2,280</td>
<td>—</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2016</td>
<td>1,950</td>
<td>1,830</td>
<td>120</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td><strong>RETIREE HEALTH INSURANCE CREDIT: NON-STATE (3)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>(For Social Services Employees)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>$ 1,202</td>
<td>$ 1,202</td>
<td>—</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2018</td>
<td>1,106</td>
<td>1,106</td>
<td>—</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2017</td>
<td>1,055</td>
<td>1,055</td>
<td>—</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2016</td>
<td>961</td>
<td>824</td>
<td>137</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td><strong>RETIREE HEALTH INSURANCE CREDIT: NON-STATE (3)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>(For Registrars)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>$ 46</td>
<td>$ 46</td>
<td>—</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2018</td>
<td>47</td>
<td>47</td>
<td>—</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<td>2017</td>
<td>45</td>
<td>45</td>
<td>—</td>
<td>N/A</td>
<td>N/A</td>
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<td>2016</td>
<td>36</td>
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### Notes for Other Postemployment Benefit Schedules

<table>
<thead>
<tr>
<th></th>
<th>Group Life Insurance Fund</th>
<th>Retiree Health Insurance Credit Fund</th>
<th>Disability Insurance Trust Fund</th>
<th>Line of Duty Act Trust Fund</th>
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<tr>
<td>Valuation Date</td>
<td>June 30, 2018</td>
<td>June 30, 2018</td>
<td>June 30, 2018</td>
<td>June 30, 2018</td>
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<td>Actuarial Cost Method</td>
<td>Entry Age Normal</td>
<td>Entry Age Normal</td>
<td>Entry Age Normal</td>
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<td>Amortization Method (1)</td>
<td>Level Percent of Pay, Closed</td>
<td>Level Percent of Pay, Closed</td>
<td>Level Percent of Pay, Closed</td>
<td>Level Percent of Pay, Open</td>
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<td>Payroll Growth Rate:</td>
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<td>State Employees</td>
<td>3.0%</td>
<td>3.0%</td>
<td>3.0%</td>
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</tr>
<tr>
<td>Teachers</td>
<td>3.0%</td>
<td>3.0%</td>
<td>N/A</td>
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<tr>
<td>Political Subdivision Employees</td>
<td>3.0%</td>
<td>3.0%</td>
<td>N/A</td>
<td>3.0%</td>
</tr>
<tr>
<td>State Police / Virginia Law Officers</td>
<td>3.0%</td>
<td>3.0%</td>
<td>3.0%</td>
<td>3.0%</td>
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<td>Judges</td>
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<td>3.0%</td>
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<td>N/A</td>
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<td>Asset Valuation Method</td>
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<td>State Employees and Teachers</td>
<td>5-Year, Smoothed Market</td>
<td>5-Year, Smoothed Market</td>
<td>5-Year, Smoothed Market</td>
<td>Market Value</td>
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<tr>
<td>Political Subdivision Employees and State-Funded Local Employees</td>
<td>5-Year, Smoothed Market</td>
<td>Market Value</td>
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<td>Market Value</td>
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<td>Actuarial Assumptions:</td>
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<td></td>
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<td></td>
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<td>Investment Rate of Return (2)</td>
<td>7.0%</td>
<td>7.0%</td>
<td>7.0%</td>
<td>4.8%</td>
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<tr>
<td>Projected Salary Increases (3)</td>
<td></td>
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<td></td>
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<tr>
<td>State Employees</td>
<td>3.5% to 5.4%</td>
<td>3.5% to 5.4%</td>
<td>3.5% to 5.4%</td>
<td>N/A</td>
</tr>
<tr>
<td>Teachers</td>
<td>3.5% to 6.0%</td>
<td>3.5% to 6.0%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Political Subdivision Employees (Non-Hazardous Duty Employees)</td>
<td>3.5% to 5.4%</td>
<td>3.5% to 5.4%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Political Subdivision Employees (Hazardous Duty Employees)</td>
<td>3.5% to 4.8%</td>
<td>3.5% to 4.8%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>State Police / Virginia Law Officers</td>
<td>3.5% to 4.8%</td>
<td>3.5% to 4.8%</td>
<td>3.5% to 4.8%</td>
<td>N/A</td>
</tr>
<tr>
<td>Judges</td>
<td>4.5%</td>
<td>4.5%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Medical Trend Assumptions (Under Age 65)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>7.3% to 4.8%</td>
</tr>
<tr>
<td>Medical Trend Assumptions (Ages 65 and Older)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>5.5% to 4.8%</td>
</tr>
<tr>
<td>Year of Ultimate Trend Rate (Under Age 65)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Fiscal Year Ended 2028</td>
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<tr>
<td>Year of Ultimate Trend Rate (Ages 65 and Older)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Fiscal Year Ended 2023</td>
</tr>
</tbody>
</table>

1. The amortization period of the Unfunded Actuarial Accrued Liability (UAAL) was a closed 30-year period for the June 30, 2013 balance and closed 20-year period for each subsequent year. The Line of Duty Act Program amortization period is 30 years for the UAAL.

2. Includes inflation rate of 2.5 percent. The Line of Duty Act Program uses 4.8% for the investment rate of return.

3. Projected salary increases for the Retiree Health Insurance Credit Fund are used in the application of the actuarial cost method. Projected salary increase factors are not applicable to the Line of Duty Act Program since neither the benefit nor the cost is salary-based.
Schedule of Changes in Employers’ Total Other Postemployment Benefit Liability (1) (2)

Fiscal Year Ended June 30, 2019
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Change in the OPEB Liability</th>
<th>PMRH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
</tr>
<tr>
<td>Total OPEB liability:</td>
<td></td>
</tr>
<tr>
<td>Service cost</td>
<td>$ 94,665</td>
</tr>
<tr>
<td>Interest cost</td>
<td>49,279</td>
</tr>
<tr>
<td>Changes of benefit terms</td>
<td>—</td>
</tr>
<tr>
<td>Difference between expected and actual experience</td>
<td>(191,000)</td>
</tr>
<tr>
<td>Changes of assumptions</td>
<td>(211,762)</td>
</tr>
<tr>
<td>Benefit payments</td>
<td>(34,446)</td>
</tr>
<tr>
<td>Net change in total OPEB liability</td>
<td>(293,264)</td>
</tr>
<tr>
<td>Total OPEB liability - beginning</td>
<td>1,298,904</td>
</tr>
<tr>
<td>Total OPEB liability - ending (a)</td>
<td>$ 1,005,640</td>
</tr>
<tr>
<td>Covered employee payroll (b)</td>
<td>$ 5,485,993</td>
</tr>
<tr>
<td>Total OPEB liability as a percentage of covered employee payroll (a/b)</td>
<td>18.3%</td>
</tr>
</tbody>
</table>

(1) The Commonwealth implemented GASB Statement No. 75, Accounting and Financial Reporting for Other Postemployment Benefits, as amended by GASB Statement No. 85, Omnibus 2017, effective for fiscal year 2018, therefore, ten years of data is unavailable.

(2) The Commonwealth’s fiscal year 2019 total OPEB liability measurement date is June 30, 2018, as reported in Note 19. There are no assets accumulated in a trust to pay related benefits.

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

Changes of assumptions – The following actuarial assumptions were updated since the June 30, 2017 valuation based on recent experience:

- Spousal Coverage - reduced the rate from 50.0% to 35.0%.
- Retiree Participation - reduced the rate from 70.0% to 60.0%.

Spousal coverage and retiree participation were both reduced based on a blend of recent experience and the prior year assumptions. The mortality assumption was modified slightly to reflect mortality improvement projection scale BB to 2020. Additionally, the discount rate was increased from 3.6% to 3.9% based on the Bond Buyers GO 20 Municipal Bond Index.
<table>
<thead>
<tr>
<th>Fiscal and Policy Year Ended</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Required contribution and investment revenue:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Earned</td>
<td>$5,485</td>
<td>$4,131</td>
<td>$5,019</td>
<td>$5,043</td>
</tr>
<tr>
<td>Ceded (a)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Net earned</td>
<td>5,485</td>
<td>4,131</td>
<td>5,019</td>
<td>5,043</td>
</tr>
<tr>
<td>2. Unallocated expenses</td>
<td>1,269</td>
<td>1,310</td>
<td>1,382</td>
<td>1,273</td>
</tr>
<tr>
<td>3. Estimated incurred claims and expenses, end of policy year:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incurred</td>
<td>3,404</td>
<td>3,213</td>
<td>5,390</td>
<td>3,394</td>
</tr>
<tr>
<td>Ceded (a)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Net incurred</td>
<td>3,404</td>
<td>3,213</td>
<td>5,390</td>
<td>3,394</td>
</tr>
<tr>
<td>4. Net paid (cumulative) as of:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>End of policy year</td>
<td>412</td>
<td>396</td>
<td>1,677</td>
<td>335</td>
</tr>
<tr>
<td>One year later</td>
<td>2,236</td>
<td>1,940</td>
<td>4,468</td>
<td>3,401</td>
</tr>
<tr>
<td>Two years later</td>
<td>5,237</td>
<td>3,943</td>
<td>7,554</td>
<td>8,118</td>
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<tr>
<td>Three years later</td>
<td>6,744</td>
<td>4,317</td>
<td>8,137</td>
<td>8,278</td>
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<tr>
<td>Four years later</td>
<td>7,013</td>
<td>4,380</td>
<td>8,991</td>
<td>7,702</td>
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<tr>
<td>Five years later</td>
<td>7,653</td>
<td>4,392</td>
<td>9,034</td>
<td>7,747</td>
</tr>
<tr>
<td>Six years later</td>
<td>7,937</td>
<td>4,401</td>
<td>9,200</td>
<td>7,946</td>
</tr>
<tr>
<td>Seven years later</td>
<td>7,951</td>
<td>4,417</td>
<td>9,200</td>
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<tr>
<td>Eight years later</td>
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<td></td>
</tr>
<tr>
<td>Nine years later</td>
<td>7,951</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Reestimated ceded claims and expenses (a)</td>
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<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>6. Reestimated incurred claims and expenses:</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>End of policy year</td>
<td>3,404</td>
<td>3,213</td>
<td>5,390</td>
<td>3,394</td>
</tr>
<tr>
<td>One year later</td>
<td>6,096</td>
<td>3,919</td>
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<td>Two years later</td>
<td>8,428</td>
<td>4,523</td>
<td>9,107</td>
<td>9,939</td>
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<tr>
<td>Three years later</td>
<td>8,640</td>
<td>4,570</td>
<td>9,727</td>
<td>10,333</td>
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<tr>
<td>Four years later</td>
<td>8,692</td>
<td>4,474</td>
<td>9,368</td>
<td>8,213</td>
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<tr>
<td>Five years later</td>
<td>7,894</td>
<td>4,444</td>
<td>9,307</td>
<td>7,980</td>
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<tr>
<td>Six years later</td>
<td>8,108</td>
<td>4,456</td>
<td>9,206</td>
<td>8,057</td>
</tr>
<tr>
<td>Seven years later</td>
<td>7,978</td>
<td>4,417</td>
<td>9,206</td>
<td></td>
</tr>
<tr>
<td>Eight years later</td>
<td>7,966</td>
<td>4,669</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nine years later</td>
<td>7,951</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Increase (decrease) in estimated net incurred claims and expense from end of policy year</td>
<td>4,547</td>
<td>1,456</td>
<td>3,816</td>
<td>4,663</td>
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</table>

The Commonwealth, through the Department of the Treasury, Division of Risk Management, provides errors and omissions liability insurance and law enforcement professional liability insurance for local governmental units, which went into effect in fiscal year 1987. Some prior year numbers have been revised to reflect the incorporation of newly available and revised source data.

See Notes on page 222 in this section.
<table>
<thead>
<tr>
<th></th>
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</thead>
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<tr>
<td>$</td>
<td>8,500</td>
<td>$8,487</td>
<td>$8,733</td>
<td>$13,213</td>
<td>$13,232</td>
<td>$13,236</td>
</tr>
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<td>—</td>
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<td>—</td>
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<td>—</td>
</tr>
<tr>
<td>8,500</td>
<td>8,487</td>
<td>8,733</td>
<td>13,213</td>
<td>13,232</td>
<td>13,236</td>
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</tr>
<tr>
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<td>1,357</td>
<td>1,460</td>
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<td>1,530</td>
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<tr>
<td>4,025</td>
<td>4,696</td>
<td>6,893</td>
<td>4,235</td>
<td>10,155</td>
<td>9,160</td>
<td></td>
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<tr>
<td>—</td>
<td>—</td>
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<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>4,025</td>
<td>4,696</td>
<td>6,893</td>
<td>4,235</td>
<td>10,155</td>
<td>9,160</td>
<td></td>
</tr>
<tr>
<td>367</td>
<td>922</td>
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<td>836</td>
<td>1,979</td>
<td>1,075</td>
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<td>4,291</td>
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<td>—</td>
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<tr>
<td>4,025</td>
<td>4,696</td>
<td>6,893</td>
<td>4,235</td>
<td>10,155</td>
<td>9,160</td>
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<tr>
<td>6,454</td>
<td>6,775</td>
<td>10,307</td>
<td>4,820</td>
<td>11,598</td>
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<td>6,979</td>
<td>8,961</td>
<td>9,908</td>
<td>5,031</td>
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</tr>
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<td>8,045</td>
<td>8,836</td>
<td>9,764</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>6,771</td>
<td>9,312</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7,289</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3,264</td>
<td>4,616</td>
<td>2,871</td>
<td>796</td>
<td>1,443</td>
<td>—</td>
<td></td>
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</table>
## Comparison of Earned Revenues and Investment Income to Related Costs of Loss and Other Expenses

<table>
<thead>
<tr>
<th>Fiscal and Policy Year Ended</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Required contribution and investment revenue:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Earned</td>
<td>$240,305</td>
<td>$246,730</td>
<td>$259,135</td>
<td>$284,526</td>
</tr>
<tr>
<td>Ceded (a)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Net earned</td>
<td>240,305</td>
<td>246,730</td>
<td>259,135</td>
<td>284,526</td>
</tr>
<tr>
<td>2. Unallocated expenses</td>
<td>15,936</td>
<td>15,849</td>
<td>16,701</td>
<td>18,781</td>
</tr>
<tr>
<td>3. Estimated incurred claims and expenses, end of policy year:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incurred</td>
<td>215,376</td>
<td>213,694</td>
<td>250,019</td>
<td>277,455</td>
</tr>
<tr>
<td>Ceded (a)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Net incurred</td>
<td>215,376</td>
<td>213,694</td>
<td>250,019</td>
<td>277,455</td>
</tr>
<tr>
<td>4. Net paid (cumulative) as of:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>End of policy year</td>
<td>214,371</td>
<td>209,365</td>
<td>235,058</td>
<td>267,256</td>
</tr>
<tr>
<td>One year later</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Two years later</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Three years later</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Four years later</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Five years later</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Six years later</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
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<td>5. Reestimated ceded claims and expenses (a)</td>
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<tr>
<td>6. Reestimated incurred claims and expenses:</td>
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<tr>
<td>End of policy year</td>
<td>215,376</td>
<td>213,694</td>
<td>250,019</td>
<td>277,455</td>
</tr>
<tr>
<td>One year later</td>
<td>215,376</td>
<td>213,694</td>
<td>250,019</td>
<td>277,455</td>
</tr>
<tr>
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<td>Six years later</td>
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<td>Seven years later</td>
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<tr>
<td>7. Increase (decrease) in estimated net incurred claims and expense from end of policy year</td>
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The Commonwealth, through its Department of Human Resource Management, provides health care insurance for local governmental units, which went into effect in fiscal year 1987.

See Notes on page 222 in this section.
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<td>$ 343,470</td>
<td>$ 392,778</td>
<td>$ 430,247</td>
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### Comparison of Earned Revenues and Investment Income to Related Costs of Loss and Other Expenses

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<tr>
<th>Fiscal and Policy Year Ended</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tr>
<td>1. Required contribution and investment revenue:</td>
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<td>Earned</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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</tr>
<tr>
<td>Ceded (a)</td>
<td>N/A</td>
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<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Net earned</td>
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<tr>
<td>2. Unallocated expenses</td>
<td>N/A</td>
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</tr>
<tr>
<td>3. Estimated incurred claims and expenses, end of policy year:</td>
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<td></td>
<td></td>
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<tr>
<td>Incurred</td>
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<tr>
<td>Ceded (a)</td>
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</tr>
<tr>
<td>Net incurred</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>4. Net paid (cumulative) as of:</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>End of policy year</td>
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<td>N/A</td>
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</tr>
<tr>
<td>One year later</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Two years later</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Three years later</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Four years later</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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</tr>
<tr>
<td>Five years later</td>
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<tr>
<td>Six years later</td>
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<tr>
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<td>N/A</td>
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<tr>
<td>Eight years later</td>
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<td>Nine years later</td>
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<tr>
<td>5. Reestimated ceded claims and expenses (a)</td>
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<tr>
<td>6. Reestimated incurred claims and expenses:</td>
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<td></td>
<td></td>
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<tr>
<td>End of policy year</td>
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<tr>
<td>One year later</td>
<td>N/A</td>
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<tr>
<td>Two years later</td>
<td>N/A</td>
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<tr>
<td>Three years later</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Four years later</td>
<td>N/A</td>
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<tr>
<td>Five years later</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Six years later</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Seven years later</td>
<td>N/A</td>
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<tr>
<td>Eight years later</td>
<td>N/A</td>
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</tr>
<tr>
<td>Nine years later</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Increase (decrease) in estimated net incurred claims and expense from end of policy year</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

The Commonwealth, through its Department of Human Resource Management, provides disability, death, and health benefits to eligible employees and their eligible family members. The Commonwealth began administering the insurance program for localities that do not participate in the State plan effective with fiscal year 2018.

See Notes on page 222 in this section.
<table>
<thead>
<tr>
<th></th>
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<td>N/A</td>
<td>N/A</td>
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<td>19,910</td>
<td>17,790</td>
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</table>
The tables on the previous pages illustrate how the Risk Management, Health Care, and Line of Duty Claims Funds earned revenues (net of reinsurance) and investment income compare to related costs of loss (net of loss assumed by reinsurers) and other expenses assumed by the funds as of the end of each of the past several years. The rows of the tables are defined as follows:

1. This line shows the total of each fiscal year’s gross earned contribution revenue and investment revenue, contribution revenue ceded to reinsurers, and net earned contribution revenue and reported investment revenue.

2. This line shows each fiscal year’s other operating costs of the funds, including overhead and claims expense not allocable to individual claims.

3. This line shows the funds’ gross incurred claims and allocated claim adjustment expenses, claims assumed by reinsurers, and net incurred claims and adjustment expenses (both paid and accrued) as originally reported at the end of the first year in which the event that triggered coverage under the contract occurred (called policy year).

4. This section of rows shows the cumulative net amounts paid as of the end of successive years for each policy year.

5. This line shows the latest reestimated amount of claims assumed by reinsurers as of the end of the current year for each accident year.

6. This section of rows shows how each policy year’s net incurred claims increased or decreased as of the end of successive years. (This annual reestimation results from new information received on known claims, reevaluation of existing information on known claims, as well as emergence of new claims not previously known.)

7. This line compares the latest reestimated net incurred claims amount to the amount originally established (line 3) and shows whether this latest estimate of net claims cost is greater or less than originally thought. As data for individual policy years mature, the correlation between original estimates and reestimated amounts is commonly used to evaluate the accuracy of net incurred claims currently recognized in less mature policy years.

The columns of the tables show data for successive policy years.

Notes:

(a) During fiscal year 1997, the Commonwealth implemented GASB Statement No. 30, *Risk Financing Omnibus*. The Commonwealth has no reinsurers; therefore, the ceded amounts on lines 1, 3, and 5 are zero.
Nonmajor Governmental Funds

Special Revenue Funds

Special Revenue Funds account for specific revenue sources that are restricted or committed to finance particular functions and activities of the Commonwealth.

The Health and Social Services Special Revenue Fund accounts for revenues and expenditures related to local health care assistance.

The Unclaimed Property Fund accounts for unclaimed and escheat property that the Commonwealth holds for its rightful owner. Due to the nature of these transactions, the Commonwealth incurs a liability upon receipt of the assets. The accompanying financial statements reflect an estimate of the amount that will be paid to claimants as required by governmental accounting standards.

The Other Special Revenue Fund accounts for revenues and expenditures related to business and agricultural activities, and miscellaneous activities throughout the Commonwealth.

Debt Service Funds

The Debt Service Funds account for transactions related to resources retained and used for the payment of interest and principal on long-term obligations recorded in the Governmental Activities column on the Government-wide Statement of Net Position. Resources include transfers in from other governmental funds and Federal revenue solely to be used for debt service payments.

Primary Government accounts for the payment of principal and interest on bonds used to acquire, construct, or improve parks, highways, and correctional, behavioral health, and parking facilities owned by the Commonwealth.

The Virginia Public Building Authority accounts for the payment of principal and interest on bonds used to acquire, construct, and operate public buildings used by the Commonwealth and its political subdivisions.

The Hampton Roads Transportation Accountability Commission accounts for the payment of principal and interest on bonds used for construction projects related to new or existing highways, bridges or tunnels in the localities comprising Planning District 23.

Capital Project Funds

The Capital Project Funds are maintained to account for resources received and used for the acquisition, construction, or improvement of capital facilities not reported in the other governmental or proprietary funds, with the exception of certain Virginia Public Building Authority disbursements.

Primary Government accounts for the financial resources acquired through the issuance of General Obligation Bonds and Energy Performance Contracts. The resources are used to acquire, construct, or improve land, public buildings, and parking facilities owned by the Commonwealth.

The Virginia Public Building Authority accounts for financial resources acquired through the issuance of section 9(d) bonds. These resources are used to acquire, construct, finance, refinance and operate public buildings used by the Commonwealth and any of its political subdivisions.

Resources are also used to finance or refinance reimbursements to localities or governmental entities for the Commonwealth’s share of the capital costs for certain authorized projects.

Hampton Roads Transportation Accountability Commission accounts for financial resources acquired through the sales and use and motor fuels taxes designated for Planning District 23. These resources will be used for construction projects related to new or existing highways, bridges or tunnels in the localities comprising Planning District 23.

Permanent Funds

Permanent Funds are funds whose principal must remain intact.

Commonwealth Health Research Fund provides financial grants for human health research benefiting the Commonwealth’s citizens. The entire fund balance is restricted for use as such as a condition of a legal settlement.

Behavioral Health Endowment Funds provide funds for the welfare of patients in behavioral health facilities. The entire fund balance is restricted for use as such.
## Combining Balance Sheet – Nonmajor Governmental Funds

June 30, 2019  
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Assets and Deferred Outflows of Resources</th>
<th>Health and Social Services</th>
<th>Unclaimed Property</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and Cash Equivalents</td>
<td>$244,649</td>
<td>$143,509</td>
<td>$302,194</td>
<td>$780,352</td>
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<tr>
<td>Investments</td>
<td>—</td>
<td>246,353</td>
<td>16,672</td>
<td>263,025</td>
</tr>
<tr>
<td>Receivables, Net</td>
<td>132,944</td>
<td>—</td>
<td>29,259</td>
<td>162,203</td>
</tr>
<tr>
<td>Due from Other Funds</td>
<td>50</td>
<td>—</td>
<td>10,813</td>
<td>10,863</td>
</tr>
<tr>
<td>Due from External Parties (Fiduciary Funds)</td>
<td>—</td>
<td>—</td>
<td>245</td>
<td>245</td>
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<td>Interfund Receivable</td>
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</tr>
<tr>
<td>Prepaid Items</td>
<td>6,182</td>
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<td>3,233</td>
<td>9,955</td>
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<td>Other Assets</td>
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<td>637</td>
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<tr>
<td>Loans Receivable from Component Units</td>
<td>—</td>
<td>—</td>
<td>4,197</td>
<td>4,197</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$389,510</td>
<td>$390,402</td>
<td>$729,920</td>
<td>$1,509,832</td>
</tr>
<tr>
<td>Deferred Outflows of Resources</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total Assets and Deferred Outflows of Resources</td>
<td>$389,510</td>
<td>$390,402</td>
<td>$729,920</td>
<td>$1,509,832</td>
</tr>
</tbody>
</table>

### Liabilities, Deferred Inflows of Resources, and Fund Balances

<table>
<thead>
<tr>
<th>Liabilities, Deferred Inflows of Resources, and Fund Balances</th>
<th>Health and Social Services</th>
<th>Unclaimed Property</th>
<th>Other</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>Accounts Payable</td>
<td>$13,472</td>
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<td>$34,660</td>
<td>$48,677</td>
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<td>4,156</td>
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<td>Due to Other Funds</td>
<td>1,519</td>
<td>53</td>
<td>3,062</td>
<td>4,634</td>
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<tr>
<td>Due to Component Units</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Due to External Parties (Fiduciary Funds)</td>
<td>588</td>
<td>24</td>
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<td>Unearned Revenue</td>
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<td>29,945</td>
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<td>Due to Claimants, Participants, Escrows and Providers</td>
<td>—</td>
<td>451,851</td>
<td>—</td>
<td>451,851</td>
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<tr>
<td>Other Liabilities</td>
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<td>5,528</td>
<td>134,377</td>
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<td>Long-term Liabilities Due Within One Year</td>
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<td>48</td>
<td>266</td>
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<td>79,219</td>
<td>701,939</td>
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<td>Deferred Inflows of Resources</td>
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<td>11,045</td>
<td>29,240</td>
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<tr>
<td>Total Liabilities and Deferred Inflows of Resources</td>
<td>188,433</td>
<td>452,482</td>
<td>90,264</td>
<td>731,179</td>
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**Fund Balances:**

<table>
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<tr>
<th>Fund Balances:</th>
<th>Nonspendable</th>
<th>Restricted</th>
<th>Committed</th>
<th>Assigned</th>
<th>Unassigned</th>
<th>Total Fund Balances (Deficit)</th>
<th>Total Liabilities, Deferred Inflows of Resources, and Fund Balances</th>
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<tbody>
<tr>
<td>Nonspendable</td>
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<td>389,510</td>
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<td>73,338</td>
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<td>—</td>
<td>(62,620)</td>
<td>(62,080)</td>
<td>639,656</td>
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<tr>
<td>Total Fund Balances (Deficit)</td>
<td>201,077</td>
<td>(62,080)</td>
<td>639,656</td>
<td>34,013</td>
<td>(62,620)</td>
<td>(778,653)</td>
<td>1,509,832</td>
</tr>
</tbody>
</table>

Total Liabilities, Deferred Inflows of Resources, and Fund Balances | $389,510 | $390,402 | $729,920 | $1,509,832 |
<table>
<thead>
<tr>
<th>Primary Government</th>
<th>Virginia Public Building Authority</th>
<th>Hampton Roads Transportation Accountability Commission</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td>$ 40,182</td>
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<tr>
<td>40,182</td>
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<tr>
<td>8,202</td>
<td>2,861</td>
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<td>11,063</td>
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<td>48,384</td>
<td>2,861</td>
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<td>51,245</td>
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<td>42,833</td>
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<td>45,694</td>
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<td></td>
</tr>
<tr>
<td>48,384</td>
<td>2,861</td>
<td></td>
<td>51,245</td>
</tr>
</tbody>
</table>

Continued on next page
### Combining Balance Sheet – Nonmajor Governmental Funds (Continued from previous page)

**June 30, 2019**

*(Dollars in Thousands)*

<table>
<thead>
<tr>
<th>Assets and Deferred Outflows of Resources</th>
<th>Primary Government</th>
<th>Virginia Public Building Authority</th>
<th>Hampton Roads Transportation Accountability Commission</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and Cash Equivalents</td>
<td>$24,776</td>
<td>$311,084</td>
<td>$763,455</td>
<td>$1,099,315</td>
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<td>Investments</td>
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<td>334,896</td>
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<tr>
<td>Receivables, Net</td>
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<td>1,957</td>
<td>2,694</td>
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<td>Due from Other Funds</td>
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<td>—</td>
<td>36,997</td>
<td>36,997</td>
</tr>
<tr>
<td>Due from External Parties (Fiduciary Funds)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Interfund Receivable</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Inventory</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Prepaid Items</td>
<td>—</td>
<td>5</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Other Assets</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Loans Receivable from Component Units</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td>24,776</td>
<td>311,826</td>
<td>1,137,309</td>
<td>1,473,911</td>
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<tr>
<td><strong>Deferred Outflows of Resources</strong></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total Assets and Deferred Outflows of Resources</strong></td>
<td>$24,776</td>
<td>$311,826</td>
<td>$1,137,309</td>
<td>$1,473,911</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities, Deferred Inflows of Resources, and Fund Balances</th>
<th>Primary Government</th>
<th>Virginia Public Building Authority</th>
<th>Hampton Roads Transportation Accountability Commission</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
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<td>64,840</td>
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<td>12,775</td>
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<td>12,802</td>
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<td>2</td>
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<tr>
<td>Unearned Revenue</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Obligations Under Securities Lending Program</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Due to Claimants, Participants, Escrows and Providers</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Other Liabilities</td>
<td>—</td>
<td>—</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Long-term Liabilities Due Within One Year</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td>384</td>
<td>41,092</td>
<td>66,249</td>
<td>107,725</td>
</tr>
<tr>
<td><strong>Deferred Inflows of Resources</strong></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total Liabilities and Deferred Inflows of Resources</strong></td>
<td>384</td>
<td>41,092</td>
<td>66,249</td>
<td>107,725</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fund Balances:</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Nonspendable</td>
<td>—</td>
<td>5</td>
<td>4</td>
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<tr>
<td>Restricted</td>
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<td>270,729</td>
<td>1,071,056</td>
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<td>Committed</td>
<td>—</td>
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</tr>
<tr>
<td>Assigned</td>
<td>—</td>
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</tr>
<tr>
<td>Unassigned</td>
<td>—</td>
<td>—</td>
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<tr>
<td><strong>Total Fund Balances (Deficit)</strong></td>
<td>24,392</td>
<td>270,734</td>
<td>1,071,060</td>
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<td><strong>Total Liabilities, Deferred Inflows of Resources, and Fund Balances</strong></td>
<td>$24,776</td>
<td>$311,826</td>
<td>$1,137,309</td>
</tr>
</tbody>
</table>

228 Commonwealth of Virginia
### Permanent Funds

<table>
<thead>
<tr>
<th>Commonwealth Health Research Board</th>
<th>Behavioral Health Endowment Funds</th>
<th>Total</th>
<th>Total Nonmajor Governmental Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 346</td>
<td>$ 135</td>
<td>$ 481</td>
<td>$ 1,920,330</td>
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<tr>
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<td>—</td>
<td>—</td>
<td>597,921</td>
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<tr>
<td>40,481</td>
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<td>40,481</td>
<td>40,726</td>
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<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>271,152</td>
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<td>7,203</td>
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<td>9,964</td>
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</tr>
<tr>
<td>—</td>
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<td>—</td>
<td>4,197</td>
</tr>
<tr>
<td>40,827</td>
<td>135</td>
<td>40,962</td>
<td>3,075,950</td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>$ 40,827</td>
<td>$ 135</td>
<td>$ 40,962</td>
<td>$ 3,075,950</td>
</tr>
</tbody>
</table>

| $ 11                              | $ —                               | $ 11  | $ 76,641                      |
| —                                 | —                                | —     | 6,280                         |
| 1                                 | —                                | 1     | 69,475                        |
| 1                                 | —                                | 1     | 12,802                        |
| 1                                 | —                                | 1     | 2,317                         |
| 26                                | —                                | 26    | 25,745                        |
| —                                 | —                                | —     | 451,851                       |
| —                                 | —                                | —     | 134,381                       |
| —                                 | —                                | —     | 266                           |
| 39                                | —                                | 39    | 809,703                       |
| —                                 | —                                | —     | 34,791                        |
| 39                                | —                                | 39    | 844,494                       |
| 39,025                            | 48                               | 39,073| 56,211                        |
| 1,763                             | 87                               | 1,850 | 1,525,862                     |
| —                                 | —                                | —     | 677,990                       |
| —                                 | —                                | —     | 34,013                        |
| —                                 | —                                | —     | (62,620)                      |
| 40,788                            | 135                              | 40,923| 2,231,456                     |
| $ 40,827                          | $ 135                            | $ 40,962| $ 3,075,950                   |
## Combining Statement of Revenues, Expenditures, and Changes in Fund Balance - Nonmajor Governmental Funds

For the Fiscal Year Ended June 30, 2019

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Special Revenue Funds</th>
<th>Health and Social Services</th>
<th>Unclaimed Property</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenues</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Taxes</td>
<td>$337,645</td>
<td>$104,057</td>
<td>$441,702</td>
<td></td>
</tr>
<tr>
<td>Rights and Privileges</td>
<td>146,684</td>
<td>188,091</td>
<td>334,775</td>
<td></td>
</tr>
<tr>
<td>Institutional Revenue</td>
<td>141,793</td>
<td>29,361</td>
<td>171,154</td>
<td></td>
</tr>
<tr>
<td>Interest, Dividends, Rents, and Other Investment Income</td>
<td>2,117</td>
<td>14,508</td>
<td>20,344</td>
<td>36,969</td>
</tr>
<tr>
<td>Federal Grants and Contracts</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Other</td>
<td>107,024</td>
<td>310,031</td>
<td>574,328</td>
<td></td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td>735,263</td>
<td>651,884</td>
<td>1,558,928</td>
<td></td>
</tr>
</tbody>
</table>

| **Expenditures**      |                           |                    |       |       |
| Current:              |                           |                    |       |       |
| General Government    | 187                       | 114,125            | 122,037|
| Education             | 114                       | 30,897             | 31,011|
| Transportation        | —                         | 4,432              | 4,432|
| Resources and Economic Development | 43,334 | 337,470 | 380,804|
| Individual and Family Services | 666,776 | 76,887 | 743,663|
| Administration of Justice | 634 | 81,386 | 82,020|
| Capital Outlay        | 2,238                     | 7,801              | 10,039|
| Debt Service:         |                           |                    |       |       |
| Principal Retirement  | —                         | —                  | —     |
| Interest and Charges  | —                         | —                  | —     |
| **Total Expenditures**| 713,283                   | 652,998            | 1,374,006|
| Revenues Over (Under) Expenditures | 21,980 | 164,056 | (1,114) | 184,922|

| **Other Financing Sources (Uses)** |                           |                    |       |       |
| Transfers In           | 2,276                     | 53,333             | 55,609|
| Transfers Out          | (23,074)                  | (38,200)           | (191,274)|
| Notes Issued           | —                         | 78                 | 78     |
| Insurance Recoveries   | 20                        | 2,187              | 2,207  |
| Capital Leases Issued  | —                         | 208                | 208    |
| Bonds Issued           | —                         | —                  | —      |
| Premium on Debt Issuance | —                       | —                  | —      |
| Refunding Bonds Issued | —                         | —                  | —      |
| Payment to Refunded Bond Escrow Agents | — | — | — |
| **Total Other Financing Sources (Uses)** | (20,778) | (130,000) | 17,606 | (133,172)|

Net Change in Fund Balances | 1,202 | 34,056 | 16,492 | 51,750 |
Fund Balance (Deficit) 1, as restated | 199,875 | (96,136) | 623,164 | 726,903 |
Fund Balance (Deficit), June 30 | $201,077 | $(62,080) | $639,656 | $778,653 |
## Debt Service Funds

<table>
<thead>
<tr>
<th>Primary Government</th>
<th>Virginia Public Building Authority</th>
<th>Hampton Roads Transportation Accountability Commission</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1,043</td>
<td>5</td>
<td>87</td>
<td>1,135</td>
</tr>
<tr>
<td>122,923</td>
<td>6,881</td>
<td>—</td>
<td>129,804</td>
</tr>
<tr>
<td>10,456</td>
<td></td>
<td>—</td>
<td>10,456</td>
</tr>
<tr>
<td>134,422</td>
<td>6,886</td>
<td>87</td>
<td>141,395</td>
</tr>
<tr>
<td></td>
<td></td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>270,070</td>
<td>157,140</td>
<td>—</td>
<td>427,210</td>
</tr>
<tr>
<td>191,699</td>
<td>103,591</td>
<td>25,854</td>
<td>321,144</td>
</tr>
<tr>
<td>461,769</td>
<td>260,731</td>
<td>25,854</td>
<td>748,354</td>
</tr>
<tr>
<td>(327,347)</td>
<td>(253,845)</td>
<td>(25,767)</td>
<td>(606,959)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>329,069</td>
<td>253,748</td>
<td>25,767</td>
<td>608,584</td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>—</td>
<td></td>
<td>—</td>
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</tr>
<tr>
<td>—</td>
<td></td>
<td>—</td>
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</tr>
<tr>
<td>6,377</td>
<td>—</td>
<td>—</td>
<td>6,377</td>
</tr>
<tr>
<td>43,360</td>
<td></td>
<td>—</td>
<td>43,360</td>
</tr>
<tr>
<td>(49,308)</td>
<td></td>
<td>—</td>
<td>(49,308)</td>
</tr>
<tr>
<td>329,498</td>
<td>253,748</td>
<td>25,767</td>
<td>609,013</td>
</tr>
<tr>
<td>2,151</td>
<td>(97)</td>
<td>—</td>
<td>2,054</td>
</tr>
<tr>
<td>40,682</td>
<td>2,958</td>
<td>—</td>
<td>43,640</td>
</tr>
<tr>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>42,833</td>
<td>2,861</td>
<td>—</td>
<td>45,694</td>
</tr>
</tbody>
</table>

*Continued on next page*
Combining Statement of Revenues, Expenditures, and Changes in Fund Balance - Nonmajor Governmental Funds (Continued from previous page)

For the Fiscal Year Ended June 30, 2019

(Dollars in Thousands)

<table>
<thead>
<tr>
<th></th>
<th>Capital Project Funds</th>
<th>Virginia Public Building Authority</th>
<th>Hampton Roads Transportation Accountability Commission</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenues</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taxes</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Rights and Privileges</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Institutional Revenue</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Interest, Dividends, Rents, and Other Investment Income</td>
<td>610</td>
<td>4,803</td>
<td>30,455</td>
<td>35,868</td>
</tr>
<tr>
<td>Federal Grants and Contracts</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Other</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td>610</td>
<td>4,803</td>
<td>30,455</td>
<td>35,868</td>
</tr>
</tbody>
</table>

| **Expenditures**         |                       |                                    |                                                      |       |
| Current:                 |                       |                                    |                                                      |       |
| General Government       | —                     | —                                  | —                                                   | —    |
| Education                | —                     | —                                  | —                                                   | —    |
| Transportation           | —                     | —                                  | —                                                   | —    |
| Resources and Economic Development | —  | — | — | — |
| Individual and Family Services | —       | —                                  | —                                                   | —    |
| Administration of Justice | —           | —                                  | —                                                   | —    |
| **Capital Outlay**       | 7,776                 | 278,380                            | 268,569                                              | 554,725 |
| Debt Service:            |                       |                                    |                                                      |       |
| Principal Retirement     | —                     | —                                  | —                                                   | —    |
| Interest and Charges     | —                     | —                                  | —                                                   | —    |
| **Total Expenditures**   | 7,776                 | 278,380                            | 268,569                                              | 554,725 |
| **Revenues Over (Under) Expenditures** | (7,166) | (273,577) | (238,114) | (518,857) |

| **Other Financing Sources (Uses)** |                       |                                    |                                                      |       |
| Transfers In              | —                     | —                                  | 223,297                                              | 223,297 |
| Transfers Out             | —                     | (4,508)                            | (25,767)                                             | (30,275) |
| Notes Issued              | 16,550                | —                                  | —                                                   | 16,550 |
| Insurance Recoveries      | —                     | —                                  | —                                                   | —    |
| Capital Leases Issued     | —                     | —                                  | —                                                   | —    |
| Bonds Issued              | —                     | 336,950                            | —                                                   | 336,950 |
| Premium on Debt Issuance  | —                     | 46,468                             | —                                                   | 46,468 |
| Refunding Bonds Issued    | —                     | —                                  | —                                                   | —    |
| Payment to Refunded Bond Escrow Agents | — | — | — | — |
| **Total Other Financing Sources (Uses)** | 16,550 | 378,910 | 197,530 | 592,990 |

<p>| Net Change in Fund Balances | 9,384 | 105,333 | (40,584) | 74,133 |
| Fund Balance (Deficit), July 1, as restated | 15,008 | 165,401 | 1,111,644 | 1,292,053 |
| <strong>Fund Balance (Deficit), June 30</strong> | $24,392 | $270,734 | $1,071,060 | $1,366,186 |</p>
<table>
<thead>
<tr>
<th>Permanent Funds</th>
<th>Commonwealth Health Research Board</th>
<th>Behavioral Health Endowment funds</th>
<th>Total</th>
<th>Total Nonmajor Governmental Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>2,601</td>
<td>3</td>
<td>2,604</td>
<td>1,738,795</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>1,342</td>
<td>—</td>
<td>1,342</td>
<td>745,005</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>1,259</td>
<td>3</td>
<td>1,262</td>
<td>(939,632)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>39,529</td>
<td>132</td>
<td>39,661</td>
<td>2,102,257</td>
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<tr>
<td>$ 40,788</td>
<td>$ 135</td>
<td>$ 40,923</td>
<td>$ 2,231,456</td>
<td></td>
</tr>
</tbody>
</table>

Commonwealth of Virginia
Schedule of Revenues, Expenditures, and Changes in Fund Balance – Budget and Actual – Nonmajor Special Revenue Funds

For the Fiscal Year Ended June 30, 2019
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Revenues:</th>
<th>Health and Social Services</th>
<th>Original Budget</th>
<th>Final Budget</th>
<th>Actual</th>
<th>Final/Actual Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxes:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales and Use</td>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Motor Fuel</td>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Deeds, Contracts, Suits</td>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Alcoholic Beverage Sales</td>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Tobacco Products</td>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Public Service Corporations</td>
<td></td>
<td>3,148</td>
<td>3,148</td>
<td>2,254</td>
<td>(894)</td>
</tr>
<tr>
<td>Other Taxes</td>
<td></td>
<td>300,000</td>
<td>277,568</td>
<td>241,163</td>
<td>(36,405)</td>
</tr>
<tr>
<td>Rights and Privileges</td>
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<td>141,987</td>
<td>143,251</td>
<td>147,538</td>
<td>4,287</td>
</tr>
<tr>
<td>Sales of Property and Commodities</td>
<td></td>
<td>850</td>
<td>1,017</td>
<td>1,077</td>
<td>60</td>
</tr>
<tr>
<td>Assessments and Receipts for Support of Special Services</td>
<td></td>
<td>—</td>
<td>—</td>
<td>4,775</td>
<td>4,775</td>
</tr>
<tr>
<td>Institutional Revenue</td>
<td></td>
<td>131,476</td>
<td>141,103</td>
<td>150,536</td>
<td>9,433</td>
</tr>
<tr>
<td>Interest, Dividends, and Rents</td>
<td></td>
<td>358</td>
<td>377</td>
<td>3,013</td>
<td>2,636</td>
</tr>
<tr>
<td>Fines, Forfeitures, Court Fees, Penalties, and Escheats</td>
<td></td>
<td>2,767</td>
<td>1,979</td>
<td>3,154</td>
<td>1,175</td>
</tr>
<tr>
<td>Receipts from Cities, Counties, and Towns</td>
<td></td>
<td>63,006</td>
<td>62,466</td>
<td>62,644</td>
<td>178</td>
</tr>
<tr>
<td>Private Donations, Gifts and Contracts</td>
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<td>2,508</td>
<td>2,308</td>
<td>2,981</td>
<td>673</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>28,130</td>
<td>32,743</td>
<td>30,602</td>
<td>(2,141)</td>
</tr>
<tr>
<td>Total Revenues</td>
<td></td>
<td>674,230</td>
<td>665,960</td>
<td>649,737</td>
<td>(16,223)</td>
</tr>
</tbody>
</table>

| Expenditures: |                             |                 |             |        |                       |
| Current: |                             |                 |             |        |                       |
| General Government |                             | —              | —           | —      | —                     |
| Education |                             | 216            | 216         | 114    | 102                   |
| Transportation |                             | —              | —           | —      | —                     |
| Resources and Economic Development |                             | 43,637         | 45,202      | 42,766 | 2,436                 |
| Individual and Family Services |                             | 705,149        | 700,738     | 529,402| 171,336               |
| Administration of Justice |                             | 683            | 708         | 649    | 59                    |
| Capital Outlay |                             | 3,821          | 6,615       | 2,182  | 4,433                 |
| Total Expenditures |                             | 753,506        | 753,479     | 575,113| 178,366               |
| Revenues Over (Under) Expenditures |                             | (79,276)       | (67,519)    | 74,624 | 162,143               |

| Other Financing Sources (Uses): |                             |                 |             |        |                       |
| Transfers: |                             |                 |             |        |                       |
| Transfers In |                             | 225            | 225         | 2,276  | 2,051                 |
| Transfers Out |                             | (19,324)       | (19,324)    | (23,074)| (3,750)               |
| Total Other Financing Sources (Uses) |                             | (19,099)       | (19,099)    | (20,798)| (1,699)               |
| Revenues and Other Sources Over (Under) |                             |                 |             |        |                       |
| Expenditures and Other Uses |                             | (98,375)       | (106,618)   | 53,826 | 160,444               |
| Fund Balance, July 1 |                             | 182,818        | 182,818     | 182,818| —                     |
| Fund Balance, June 30 |                             | $ 84,443       | $ 76,200    | $ 236,644| $ 160,444             |

See Notes on page 236 in this section.
<table>
<thead>
<tr>
<th>Original Budget</th>
<th>Final Budget</th>
<th>Actual</th>
<th>Final/Actual Variance Positive (Negative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ —</td>
<td>$ 28,000</td>
<td>$ 20,358</td>
<td>$(7,642)</td>
</tr>
<tr>
<td>34,330</td>
<td>34,155</td>
<td>32,769</td>
<td>$(1,386)</td>
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<tr>
<td>576</td>
<td>1,000</td>
<td>1,004</td>
<td>4</td>
</tr>
<tr>
<td>845</td>
<td>827</td>
<td>830</td>
<td>3</td>
</tr>
<tr>
<td>113</td>
<td>113</td>
<td>158</td>
<td>45</td>
</tr>
<tr>
<td>10,351</td>
<td>10,448</td>
<td>10,860</td>
<td>412</td>
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<tr>
<td>25,808</td>
<td>29,723</td>
<td>35,757</td>
<td>6,034</td>
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<tr>
<td>206,686</td>
<td>206,676</td>
<td>187,883</td>
<td>$(18,793)</td>
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<tr>
<td>7,792</td>
<td>8,547</td>
<td>6,374</td>
<td>$(2,173)</td>
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<td>126,169</td>
<td>118,253</td>
<td>120,663</td>
<td>2,410</td>
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<td>29,745</td>
<td>30,880</td>
<td>29,220</td>
<td>$(1,660)</td>
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<td>13,867</td>
<td>20,106</td>
<td>19,878</td>
<td>$(228)</td>
</tr>
<tr>
<td>51,046</td>
<td>51,359</td>
<td>62,174</td>
<td>10,815</td>
</tr>
<tr>
<td>1,213</td>
<td>1,228</td>
<td>1,355</td>
<td>127</td>
</tr>
<tr>
<td>562</td>
<td>1,329</td>
<td>4,266</td>
<td>2,957</td>
</tr>
<tr>
<td>75,657</td>
<td>92,345</td>
<td>117,413</td>
<td>25,068</td>
</tr>
<tr>
<td>584,760</td>
<td>634,989</td>
<td>650,982</td>
<td>15,993</td>
</tr>
</tbody>
</table>

Other

<table>
<thead>
<tr>
<th>Original Budget</th>
<th>Final Budget</th>
<th>Actual</th>
<th>Final/Actual Variance Positive (Negative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>85,113</td>
<td>121,905</td>
<td>111,498</td>
<td>10,407</td>
</tr>
<tr>
<td>34,103</td>
<td>34,772</td>
<td>30,191</td>
<td>4,581</td>
</tr>
<tr>
<td>8,903</td>
<td>5,003</td>
<td>4,543</td>
<td>460</td>
</tr>
<tr>
<td>361,734</td>
<td>376,404</td>
<td>336,683</td>
<td>39,721</td>
</tr>
<tr>
<td>84,055</td>
<td>89,127</td>
<td>76,966</td>
<td>12,161</td>
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<td>87,831</td>
<td>90,836</td>
<td>80,916</td>
<td>9,920</td>
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<td>25,702</td>
<td>30,010</td>
<td>7,947</td>
<td>22,063</td>
</tr>
<tr>
<td>687,441</td>
<td>748,057</td>
<td>648,744</td>
<td>99,313</td>
</tr>
<tr>
<td>(102,681)</td>
<td>(113,068)</td>
<td>2,238</td>
<td>115,306</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Original Budget</th>
<th>Final Budget</th>
<th>Actual</th>
<th>Final/Actual Variance Positive (Negative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>21,427</td>
<td>21,263</td>
<td>53,332</td>
<td>32,069</td>
</tr>
<tr>
<td>(16,501)</td>
<td>(27,668)</td>
<td>(38,150)</td>
<td>(10,482)</td>
</tr>
<tr>
<td>4,926</td>
<td>(6,405)</td>
<td>15,182</td>
<td>21,587</td>
</tr>
<tr>
<td>(97,755)</td>
<td>(119,473)</td>
<td>17,420</td>
<td>136,893</td>
</tr>
<tr>
<td>633,983</td>
<td>633,983</td>
<td>633,983</td>
<td>—</td>
</tr>
<tr>
<td>$ 536,228</td>
<td>$ 514,510</td>
<td>$ 651,403</td>
<td>$ 136,893</td>
</tr>
</tbody>
</table>

Commonwealth of Virginia 235
1. **Basis of Budgeting vs. Modified Accrual Basis Fund Balance (1)**

Since the presentation of financial data on the basis of budgeting differs from that presented under accounting principles generally accepted in the United States of America, a schedule reconciling the fund balance on a budgetary basis at June 30, 2019, to the fund balance on a modified accrual basis follows.

<table>
<thead>
<tr>
<th>(Dollars in Thousands)</th>
<th>Health and Social Services</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fund Balance, Basis of Budgeting</td>
<td>$236,644</td>
<td>$651,403</td>
</tr>
</tbody>
</table>

**Adjustments from Budget to Modified Accrual:**

- **Net Accrued Revenues:**
  - Taxes: 100,434 / 8,032
  - Other Revenue/Other Sources: (5,324) / 6,807
  - Medicaid Payable: (128,690) / —

- **Net Accrued Expenditures/Other Uses:**
  - (1,859) / (25,227)

- **Fund Reclassification - Budget to Modified Accrual:**
  - (128) / (1,359)

**Fund Balance, Modified Accrual Basis:**

- $201,077 / $639,656

---

1. As discussed in Note 1.E., the Unclaimed Property Fund has no approved budget.

2. **Appropriations**

The amounts presented in the Schedule of Revenues, Expenditures, and Changes in Fund Balance – Budget and Actual – Nonmajor Special Revenue Funds are principally on a cash basis and represent the original budget adopted by the General Assembly and all supplemental appropriations and transfers. The following schedule reconciles original appropriations to the final adjusted expenditure appropriations for the Nonmajor Special Revenue Funds, at June 30, 2019, except for the Unclaimed Property Fund which has no approved budget.

<table>
<thead>
<tr>
<th>(Dollars in Thousands)</th>
<th>Health and Social Services</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriations (1)</td>
<td>$753,506</td>
<td>$687,441</td>
</tr>
<tr>
<td>Supplemental Appropriations:</td>
<td></td>
<td></td>
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</tbody>
</table>
  - Reappropriations (2): 3,821 / 35,209
  - Subsequent Executive (3): 298,873 / 42,857
  - Subsequent Legislative (4): (17,638) / 15,137
  - Capital Outlay Reversions (5): (206) / (666)
  - Transfers (6): (281,056) / 818
  - Capital Outlay Adjustment (7): (3,821) / (32,739)
| Appropriations, as adjusted | $753,479 | $748,057 |

2. Actions taken to reappropriate any prior year unexpended balances per authority of the language in the Appropriation Act.
3. Actions taken by the Governor to appropriate any additional revenues collected so that they can be legally spent.
4. Actions taken by the Governor and the General Assembly to adjust the budget.
5. Represents reversions of unexpended capital outlay balances.
6. Represents transfers required by the Appropriation Act.
7. Capital outlay appropriations cover the projects’ lives and usually extend beyond the current fiscal year. These amounts have been adjusted to report the amount authorized for expenditure during the current fiscal year.
Nonmajor Enterprise Funds

The Enterprise Funds account for operations that are financed and operated in a manner similar to private business enterprises. It is the intent that the cost of providing such goods or services will be recovered through user charges.

Alcoholic Beverage Control operates facilities for the distribution and sale of distilled spirits and wine.

Risk Management accounts for pooled resources received and used by the Department of the Treasury for financing local government insurance programs. This includes Local Entities Bond Insurance, Public Officials Insurance and Law Enforcement Insurance.

Local Choice Health Care administers a health care plan for the employees of participating local governments.

Line of Duty accounts for the disability, death, and health benefits provided to eligible local government employees and their family members.

Virginia Industries for the Blind manufactures products for sale to governments, certain private organizations, and the general public.

Consolidated Laboratory provides water testing services and a newborn screening program.

eVA Procurement System accounts for the statewide electronic procurement system.

Department of Environmental Quality accounts for the Title V program that offers services to the general public.

Wireless E-911 Service Board assists in the establishment of wireless E-911 service in Virginia localities.

Virginia Museum of Fine Arts accounts for gift shop and food service activities.

Science Museum of Virginia accounts for gift shop activities.

Behavioral Health Local Funds account for the canteen store and work activity programs.
### Combining Statement of Fund Net Position – Nonmajor Enterprise Funds

**June 30, 2019**
(Dollars in Thousands)

### Assets and Deferred Outflows of Resources

<table>
<thead>
<tr>
<th></th>
<th>Alcoholic Beverage Control</th>
<th>Risk Management</th>
<th>Local Choice Health Care</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Assets:</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Cash and Cash Equivalents</td>
<td>$ 1,428</td>
<td>$ 28,913</td>
<td>$ 101,074</td>
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<tr>
<td>Receivables, Net</td>
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<tr>
<td>Inventory</td>
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<tr>
<td>Prepaid Items</td>
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<tr>
<td>Other Assets</td>
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<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total Current Assets</strong></td>
<td>92,999</td>
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<td>135,301</td>
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<td><strong>Noncurrent Assets:</strong></td>
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</tr>
<tr>
<td>Other Assets</td>
<td>2,728</td>
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<td>48</td>
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<tr>
<td>Nondepreciable Capital Assets</td>
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<td>—</td>
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<tr>
<td>Depreciable Capital Assets, Net</td>
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<td>—</td>
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<td><strong>Total Noncurrent Assets</strong></td>
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<td><strong>Total Assets</strong></td>
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<td>29,184</td>
<td>135,349</td>
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<td><strong>Deferred Outflows of Resources</strong></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>13,506</td>
<td>106</td>
<td>255</td>
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<td><strong>Total Assets and Deferred Outflows of Resources</strong></td>
<td>124,719</td>
<td>29,290</td>
<td>135,604</td>
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### Liabilities and Deferred Inflows of Resources

<table>
<thead>
<tr>
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<th>Alcoholic Beverage Control</th>
<th>Risk Management</th>
<th>Local Choice Health Care</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Liabilities:</strong></td>
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<tr>
<td>Accounts Payable</td>
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<td>Amounts Due to Other Governments</td>
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<tr>
<td>Due to Other Funds</td>
<td>15,000</td>
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<td>Due to External Parties (Fiduciary Funds)</td>
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<tr>
<td>Interfund Payable</td>
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<tr>
<td>Unearned Revenue</td>
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<td>Obligations Under Securities Lending Program</td>
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<td>2,178</td>
<td>7,614</td>
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<tr>
<td><strong>Other Liabilities</strong></td>
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<tr>
<td>Claims Payable Due Within One Year</td>
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<td><strong>Long-term Liabilities Due Within One Year</strong></td>
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<td><strong>Noncurrent Liabilities:</strong></td>
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<tr>
<td>Claims Payable Due in More Than One Year</td>
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<td>28,637</td>
<td>—</td>
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<tr>
<td><strong>Long-term Liabilities Due in More Than One Year</strong></td>
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<td><strong>Total Noncurrent Liabilities</strong></td>
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<td><strong>Total Liabilities</strong></td>
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### Deferred Inflows of Resources

<table>
<thead>
<tr>
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<th>Alcoholic Beverage Control</th>
<th>Risk Management</th>
<th>Local Choice Health Care</th>
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</thead>
<tbody>
<tr>
<td><strong>Deferred Inflows of Resources</strong></td>
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<td></td>
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<tr>
<td><strong>Total Liabilities and Deferred Inflows of Resources</strong></td>
<td>215,441</td>
<td>43,943</td>
<td>70,990</td>
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</table>

### Net Position

<table>
<thead>
<tr>
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<th>Alcoholic Beverage Control</th>
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<th>Local Choice Health Care</th>
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<tr>
<td><strong>Net Investment in Capital Assets</strong></td>
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<td>—</td>
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<td>Restricted for Net Other Postemployment Benefit -Virginia Sickness and Disability Program</td>
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<td>27</td>
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<tr>
<td>Unrestricted</td>
<td>(108,399)</td>
<td>(14,795)</td>
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<td><strong>Total Net Position (Deficit)</strong></td>
<td>$ (90,722)</td>
<td>$ (14,653)</td>
<td>$ 64,614</td>
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</table>

238  Commonwealth of Virginia
<table>
<thead>
<tr>
<th>Line of Duty</th>
<th>Virginia Industries for the Blind</th>
<th>Consolidated Laboratory</th>
<th>eVA Procurement System</th>
<th>Department of Environmental Quality</th>
<th>Wireless E-911 Service Board</th>
<th>Virginia Museum of Fine Arts</th>
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<tr>
<td>$ 2,699</td>
<td>$ 7,098</td>
<td>$ 1,835</td>
<td>$ 8,293</td>
<td>$ 1,789</td>
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<td>$ 1,065</td>
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<td>100</td>
<td>898</td>
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<tr>
<td>—</td>
<td>7,130</td>
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<td>—</td>
<td>9,952</td>
<td>1,963</td>
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<td>64</td>
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<tr>
<td>3,315</td>
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<td>2,070</td>
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<td>—</td>
<td>751</td>
<td>526</td>
<td>430</td>
<td>963</td>
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<td>7,925</td>
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<td>1,513</td>
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<td>—</td>
<td>358</td>
<td>367</td>
<td>209</td>
<td>515</td>
<td>86</td>
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<td>1,981</td>
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<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>—</td>
<td>5,267</td>
<td>4,722</td>
<td>5,482</td>
<td>9,748</td>
<td>1,533</td>
<td>2,174</td>
</tr>
<tr>
<td>—</td>
<td>5,267</td>
<td>4,722</td>
<td>5,482</td>
<td>9,748</td>
<td>1,533</td>
<td>2,174</td>
</tr>
<tr>
<td>1,794</td>
<td>7,901</td>
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<tr>
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<td>799</td>
<td>678</td>
<td>1,482</td>
<td>335</td>
<td>358</td>
</tr>
<tr>
<td>1,794</td>
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<td>9,880</td>
<td>9,620</td>
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<td>13,736</td>
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<td>48</td>
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<tr>
<td>1,521</td>
<td>7,327</td>
<td>(6,710)</td>
<td>4,196</td>
<td>(10,419)</td>
<td>24,809</td>
<td>(783)</td>
</tr>
<tr>
<td>$ 1,521</td>
<td>$ 17,532</td>
<td>$ (5,140)</td>
<td>$ 4,297</td>
<td>$ (10,178)</td>
<td>$ 24,857</td>
<td>$ (734)</td>
</tr>
</tbody>
</table>

Continued on next page
### Combining Statement of Fund Net Position – Nonmajor Enterprise Funds
*(Continued from previous page)*

June 30, 2019

(Dollars in Thousands)

<table>
<thead>
<tr>
<th></th>
<th>Science Museum of Virginia</th>
<th>Behavioral Health Local Funds</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets and Deferred Outflows of Resources</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Current Assets:</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Cash and Cash Equivalents</td>
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<td>$ 366</td>
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<td>Receivables, Net</td>
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<td>Due From Other Funds</td>
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<td><strong>366</strong></td>
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<td>Other Assets</td>
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<td>Nondepreciable Capital Assets</td>
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<td><strong>Total Assets and Deferred Outflows of Resources</strong></td>
<td><strong>356</strong></td>
<td><strong>366</strong></td>
<td><strong>382,825</strong></td>
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<table>
<thead>
<tr>
<th></th>
<th>Science Museum of Virginia</th>
<th>Behavioral Health Local Funds</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Liabilities and Deferred Inflows of Resources</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Current Liabilities:</strong></td>
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<tr>
<td>Accounts Payable</td>
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<td>Amounts Due to Other Governments</td>
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<tr>
<td>Due to Other Funds</td>
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<td>18,130</td>
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<tr>
<td>Due to External Parties (Fiduciary Funds)</td>
<td>—</td>
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<td>711</td>
</tr>
<tr>
<td>Interfund Payable</td>
<td>—</td>
<td>—</td>
<td>44,995</td>
</tr>
<tr>
<td>Unearned Revenue</td>
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<td>Obligations Under Securities Lending Program</td>
<td>—</td>
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</tr>
<tr>
<td><strong>Other Liabilities</strong></td>
<td>—</td>
<td>136</td>
<td>136</td>
</tr>
<tr>
<td>Claims Payable Due Within One Year</td>
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<td><strong>Total Current Liabilities</strong></td>
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<td><strong>136</strong></td>
<td><strong>215,095</strong></td>
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<tr>
<td><strong>Noncurrent Liabilities:</strong></td>
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</tr>
<tr>
<td>Claims Payable Due in More Than One Year</td>
<td>—</td>
<td>—</td>
<td>28,637</td>
</tr>
<tr>
<td><strong>Total Noncurrent Liabilities</strong></td>
<td><strong>136</strong></td>
<td>—</td>
<td><strong>155,630</strong></td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td>179</td>
<td>136</td>
<td>370,725</td>
</tr>
<tr>
<td><strong>Deferred Inflows of Resources</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Liabilities and Deferred Inflows of Resources</strong></td>
<td><strong>194</strong></td>
<td><strong>136</strong></td>
<td><strong>391,039</strong></td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th></th>
<th>Science Museum of Virginia</th>
<th>Behavioral Health Local Funds</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net Position</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Investment in Capital Assets</td>
<td>—</td>
<td>—</td>
<td>27,147</td>
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<tr>
<td>Restricted for Net Other Postemployment Benefit - Virginia Sickness and Disability Program</td>
<td>3</td>
<td>—</td>
<td>2,926</td>
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<tr>
<td>Unrestricted</td>
<td>159</td>
<td>230</td>
<td>(38,287)</td>
</tr>
<tr>
<td><strong>Total Net Position (Deficit)</strong></td>
<td><strong>$ 162</strong></td>
<td><strong>$ 230</strong></td>
<td><strong>(8,214)</strong></td>
</tr>
</tbody>
</table>
# Combining Statement of Revenues, Expenses, and Changes in Fund Net Position – Nonmajor Enterprise Funds

For the Fiscal Year Ended June 30, 2019

(Dollars in Thousands)

<table>
<thead>
<tr>
<th></th>
<th>Alcoholic Beverage</th>
<th>Risk Management</th>
<th>Local Choice Health Care</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating Revenues</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charges for Sales and Services</td>
<td>$881,006</td>
<td>$12,638</td>
<td>$479,997</td>
</tr>
<tr>
<td>Interest, Dividends, Rents, and Other Investment Income</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Other</td>
<td>21,478</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total Operating Revenues</strong></td>
<td>902,484</td>
<td>12,638</td>
<td>479,997</td>
</tr>
<tr>
<td><strong>Operating Expenses</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of Sales and Services</td>
<td>505,167</td>
<td>—</td>
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<tr>
<td>Prizes and Claims</td>
<td>—</td>
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<td>446,606</td>
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<td>Personal Services</td>
<td>112,119</td>
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<td>1,372</td>
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<td>Contractual Services</td>
<td>40,933</td>
<td>612</td>
<td>24,253</td>
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<tr>
<td>Supplies and Materials</td>
<td>3,497</td>
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<td>653</td>
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<tr>
<td>Depreciation</td>
<td>2,127</td>
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<tr>
<td>Rent, Insurance, and Other Related Charges</td>
<td>34,277</td>
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<td>Non-recurring Cost Estimate Payments to Providers</td>
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<td>Other</td>
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<td><strong>Total Operating Expenses</strong></td>
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<td>14,831</td>
<td>472,884</td>
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<tr>
<td><strong>Operating Income (Loss)</strong></td>
<td>201,124</td>
<td>(2,193)</td>
<td>7,113</td>
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<tr>
<td><strong>Nonoperating Revenues (Expenses)</strong></td>
<td></td>
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</tr>
<tr>
<td>Interest, Dividends, Rents, and Other Investment Income</td>
<td>797</td>
<td>662</td>
<td>2,051</td>
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<td>Other</td>
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<td><strong>Total Nonoperating Revenues (Expenses)</strong></td>
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<td><strong>Income (Loss) Before Transfers</strong></td>
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<td>Transfers Out</td>
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<td>(1,594)</td>
<td>8,413</td>
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<td>(95,989)</td>
<td>(13,059)</td>
<td>56,201</td>
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<td>$ (14,653)</td>
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<td>Line of Duty</td>
<td>Virginia Industries for the Blind</td>
<td>Consolidated Laboratory</td>
<td>eVA Procurement System</td>
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</tr>
<tr>
<td>$ 17,787</td>
<td>$ 50,894</td>
<td>$ 11,685</td>
<td>$ 21,437</td>
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<td>—</td>
<td>3</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>—</td>
<td>444</td>
<td>—</td>
<td>—</td>
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<tr>
<td>17,787</td>
<td>51,341</td>
<td>11,685</td>
<td>21,437</td>
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<tr>
<td>—</td>
<td>36,766</td>
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<tr>
<td>16,989</td>
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<td>1,274</td>
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<td>436</td>
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<td>1,057</td>
<td>1,485</td>
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<tr>
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<td>13</td>
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<tr>
<td>17,831</td>
<td>50,158</td>
<td>10,541</td>
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<td>(44)</td>
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<tr>
<td>(5)</td>
<td>—</td>
<td>(11)</td>
<td>—</td>
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<td>1,183</td>
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<td>640</td>
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<td>—</td>
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<td>(1,625)</td>
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<tr>
<td>4</td>
<td>1,151</td>
<td>(492)</td>
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<tr>
<td>1,517</td>
<td>16,381</td>
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<td>3,657</td>
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<tr>
<td>$ 1,521</td>
<td>$ 17,532</td>
<td>$ (5,140)</td>
<td>$ 4,297</td>
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<tr>
<td>(734)</td>
<td>Continued on next page</td>
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<td></td>
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</tbody>
</table>

Commonwealth of Virginia 243
Combining Statement of Revenues, Expenses, and Changes in Fund Net Position – Nonmajor Enterprise Funds *(Continued from previous page)*

For the Fiscal Year Ended June 30, 2019

(Dollars in Thousands)

<table>
<thead>
<tr>
<th></th>
<th>Science Museum of Virginia</th>
<th>Behavioral Health Local Funds</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating Revenues</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charges for Sales and Services</td>
<td>$ 442</td>
<td>$ 333</td>
<td>$ 1,557,970</td>
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<td>Interest, Dividends, Rents, and Other Investment Income</td>
<td>—</td>
<td>—</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>—</td>
<td>—</td>
<td>21,991</td>
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<tr>
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<td>333</td>
<td>1,579,964</td>
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<td><strong>Operating Expenses</strong></td>
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<td></td>
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<tr>
<td>Cost of Sales and Services</td>
<td>175</td>
<td>299</td>
<td>544,849</td>
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<td>Prizes and Claims</td>
<td>—</td>
<td>—</td>
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<td>Personal Services</td>
<td>145</td>
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<td>143,839</td>
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<td>Contractual Services</td>
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<td>—</td>
<td>88,683</td>
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<tr>
<td>Supplies and Materials</td>
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<td>—</td>
<td>8,405</td>
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<tr>
<td>Depreciation</td>
<td>2</td>
<td>—</td>
<td>2,990</td>
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<tr>
<td>Rent, Insurance, and Other Related Charges</td>
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<td>—</td>
<td>38,998</td>
</tr>
<tr>
<td>Non-recurring Cost Estimate Payments to Providers</td>
<td>—</td>
<td>—</td>
<td>42,066</td>
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<tr>
<td>Other</td>
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<td>—</td>
<td>3,405</td>
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<tr>
<td><strong>Total Operating Expenses</strong></td>
<td>354</td>
<td>299</td>
<td>1,350,171</td>
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<tr>
<td><strong>Operating Income (Loss)</strong></td>
<td>88</td>
<td>34</td>
<td>229,793</td>
</tr>
<tr>
<td><strong>Nonoperating Revenues (Expenses)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest, Dividends, Rents, and Other Investment Income</td>
<td>—</td>
<td>—</td>
<td>4,178</td>
</tr>
<tr>
<td>Other</td>
<td>—</td>
<td>—</td>
<td>8,691</td>
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<tr>
<td><strong>Total Nonoperating Revenues (Expenses)</strong></td>
<td>—</td>
<td>—</td>
<td>12,869</td>
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<tr>
<td><strong>Income (Loss) Before Transfers</strong></td>
<td>88</td>
<td>34</td>
<td>242,662</td>
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<tr>
<td>Transfers In</td>
<td>—</td>
<td>—</td>
<td>121</td>
</tr>
<tr>
<td><strong>Transfers Out</strong></td>
<td>(35)</td>
<td>(9)</td>
<td>(221,997)</td>
</tr>
<tr>
<td>Change in Net Position</td>
<td>53</td>
<td>25</td>
<td>20,786</td>
</tr>
<tr>
<td><strong>Total Net Position (Deficit), July 1</strong></td>
<td>109</td>
<td>205</td>
<td>(29,000)</td>
</tr>
<tr>
<td><strong>Total Net Position (Deficit), June 30</strong></td>
<td>$ 162</td>
<td>$ 230</td>
<td>$ (8,214)</td>
</tr>
</tbody>
</table>
# Combining Statement of Cash Flows – Nonmajor Enterprise Funds

For the Fiscal Year Ended June 30, 2019  
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Cash Flows from Operating Activities</th>
<th>Alcoholic Beverage Control</th>
<th>Risk Management</th>
<th>Local Choice Health Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receipts for Sales and Services</td>
<td>$ 895,342</td>
<td>$ 12,468</td>
<td>$ 477,302</td>
</tr>
<tr>
<td>Internal Activity-Receipts from Other Funds</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Internal Activity-Payments to Other Funds</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Payments to Suppliers for Goods and Services</td>
<td>(562,758)</td>
<td>—</td>
<td>(671)</td>
</tr>
<tr>
<td>Payments for Contractual Services</td>
<td>(40,933)</td>
<td>(505)</td>
<td>(22,361)</td>
</tr>
<tr>
<td>Payments for Prizes, Claims, and Loss Control</td>
<td>—</td>
<td>(10,116)</td>
<td>(443,931)</td>
</tr>
<tr>
<td>Payments to Employees</td>
<td>(116,908)</td>
<td>(1,032)</td>
<td>(1,426)</td>
</tr>
<tr>
<td>Payments to Providers for Non-recurring Cost Estimates</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Other Operating Revenue</td>
<td>4,731</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Other Operating Expense</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Net Cash Provided by (Used for) Operating Activities</td>
<td>$ 179,474</td>
<td>815</td>
<td>8,913</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cash Flows from Noncapital Financing Activities</th>
<th>Alcoholic Beverage Control</th>
<th>Risk Management</th>
<th>Local Choice Health Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfers In from Other Funds</td>
<td>121</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Transfers Out to Other Funds</td>
<td>(458,466)</td>
<td>—</td>
<td>(559)</td>
</tr>
<tr>
<td>Other Noncapital Financing Receipt Activities</td>
<td>306,527</td>
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<tr>
<td>Other Noncapital Financing Disbursement Activities</td>
<td>(39,920)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Net Cash Provided by (Used for) Noncapital Financing Activities</td>
<td>(191,738)</td>
<td>—</td>
<td>(559)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cash Flows from Capital and Related Financing Activities</th>
<th>Alcoholic Beverage Control</th>
<th>Risk Management</th>
<th>Local Choice Health Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition of Capital Assets</td>
<td>(8,502)</td>
<td>(32)</td>
<td>—</td>
</tr>
<tr>
<td>Payment of Principal and Interest on Bonds and Notes</td>
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<tr>
<td>Net Cash Used for Capital and Related Financing Activities</td>
<td>(8,502)</td>
<td>(32)</td>
<td>—</td>
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</table>

<table>
<thead>
<tr>
<th>Cash Flows from Investing Activities</th>
<th>Alcoholic Beverage Control</th>
<th>Risk Management</th>
<th>Local Choice Health Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment Income on Cash, Cash Equivalents, and Investments</td>
<td>607</td>
<td>599</td>
<td>1,859</td>
</tr>
<tr>
<td>Net Cash Provided by Investing Activities</td>
<td>607</td>
<td>599</td>
<td>1,859</td>
</tr>
<tr>
<td>Net Increase (Decrease) in Cash and Cash Equivalents</td>
<td>$ 1,510</td>
<td>$ 26,735</td>
<td>$ 93,460</td>
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<tr>
<td>Cash and Cash Equivalents, June 30</td>
<td>$ 21,669</td>
<td>25,353</td>
<td>83,247</td>
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</table>

<table>
<thead>
<tr>
<th>Reconciliation of Cash and Cash Equivalents</th>
<th>Alcoholic Beverage Control</th>
<th>Risk Management</th>
<th>Local Choice Health Care</th>
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<tbody>
<tr>
<td>Per the Statement of Net Position:</td>
<td></td>
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<tr>
<td>Cash and Cash Equivalents</td>
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<td>$ 28,913</td>
<td>$ 101,074</td>
</tr>
<tr>
<td>Cash and Travel Advances</td>
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<td>—</td>
</tr>
<tr>
<td>Less:</td>
<td></td>
<td></td>
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<tr>
<td>Securities Lending Cash Equivalents</td>
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<td>(2,178)</td>
<td>(7,614)</td>
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<td>Cash and Cash Equivalents per the Statement of Cash Flows</td>
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<td>$ 26,735</td>
<td>$ 93,460</td>
</tr>
<tr>
<td>Line of Duty</td>
<td>Virginia Industries for the Blind</td>
<td>Consolidated Laboratory</td>
<td>eVA Procurement System</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------------------------</td>
<td>-------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>$17,856</td>
<td>$47,203</td>
<td>$12,006</td>
<td>$17,056</td>
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<td>1,000</td>
<td>4,856</td>
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<td></td>
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<td>(1,314)</td>
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<td>(1,855)</td>
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<td>(847)</td>
<td>(38,510)</td>
<td>(4,518)</td>
<td>(29)</td>
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<td>(15,641)</td>
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<tr>
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<td>(4,029)</td>
<td>(3,573)</td>
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<td></td>
<td>(1,632)</td>
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</tr>
<tr>
<td>(800)</td>
<td>(68)</td>
<td>2,030</td>
<td>814</td>
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<td>(1,284)</td>
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<td>3,780</td>
<td>7,198</td>
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<td>7,479</td>
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<td>$2,496</td>
<td>$7,098</td>
<td>$1,835</td>
<td>$8,293</td>
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<td>$7,098</td>
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<td>$8,293</td>
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<tr>
<td>(203)</td>
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<td>(135)</td>
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<tr>
<td>$2,496</td>
<td>$7,098</td>
<td>$1,835</td>
<td>$8,293</td>
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Continued on next page
### Combining Statement of Cash Flows – Nonmajor Enterprise Funds (Continued from previous page)

For the Fiscal Year Ended June 30, 2019

(Dollars inThousands)

<table>
<thead>
<tr>
<th></th>
<th>Science Museum of Virginia</th>
<th>Behavioral Health Local Funds</th>
<th>Total</th>
</tr>
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<tr>
<td><strong>Cash Flows from Operating Activities</strong></td>
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<tr>
<td>Receipts for Sales and Services</td>
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<td>Payments to Suppliers for Goods and Services</td>
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<td>Payments for Contractual Services</td>
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<td>Payments for Prizes, Claims, and Loss Control</td>
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<td>Payments to Providers for Non-recurring Cost Estimates</td>
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<td>Other Operating Expense</td>
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<td>(2,265)</td>
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<td>Net Cash Provided by (Used for) Operating Activities</td>
<td>$103</td>
<td>$34</td>
<td>$211,537</td>
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</tbody>
</table>

| **Cash Flows from Noncapital Financing Activities** |                           |                               |        |
| Transfers In from Other Funds         | —                          | —                             | 121    |
| Transfers Out to Other Funds         | (35)                       | (9)                           | (474,662) |
| Other Noncapital Financing Receipt Activities | —                          | —                             | 306,527 |
| Other Noncapital Financing Disbursement Activities | —                          | (17)                         | (40,469) |
| Net Cash Provided by (Used for) Noncapital Financing Activities | (35)                       | (26)                         | (208,483) |

| **Cash Flows from Capital and Related Financing Activities** |                           |                               |        |
| Acquisition of Capital Assets        | —                          | —                             | (9,584) |
| Payment of Principal and Interest on Bonds and Notes | —                          | —                             | (62) |
| Net Cash Used for Capital and Related Financing Activities | —                          | —                             | (9,646) |

| **Cash Flows from Investing Activities** |                           |                               |        |
| Investment Income on Cash, Cash Equivalents, and Investments | —                          | —                             | 3,664  |
| Net Cash Provided by Investing Activities | —                          | —                             | 3,664  |

| **Net Increase (Decrease) in Cash and Cash Equivalents** |                           |                               |        |
| Cash Equivalents                      | 68                         | 8                             | (2,928) |

| **Cash and Cash Equivalents, July 1** |                           |                               |        |
| Cash and Cash Equivalents, June 30    | $268                       | $366                          | $175,226 |

| **Reconciliation of Cash and Cash Equivalents** |                           |                               |        |
| Per the Statement of Net Position: |                           |                               |        |
| Cash and Cash Equivalents             | $268                       | $366                          | $187,748 |
| Cash and Travel Advances              | —                          | —                             | 206    |
| Less:                                 | —                          | —                             | (12,728) |
| Securities Lending Cash Equivalents   | —                          | —                             | (12,728) |
| Cash and Cash Equivalents per the Statement of Cash Flows | $268                      | $366                          | $175,226 |
Reconciliation of Operating Income

<table>
<thead>
<tr>
<th>To Net Cash Provided by (Used for)</th>
<th>Alcoholic Beverage Control</th>
<th>Risk Management</th>
<th>Local Choice Health Care</th>
</tr>
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<tbody>
<tr>
<td>Operating Activities:</td>
<td></td>
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</tr>
<tr>
<td>Operating Income (Loss)</td>
<td>$ 201,124</td>
<td>$ (2,193)</td>
<td>$ 7,113</td>
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<tr>
<td>Adjustments to Reconcile Operating</td>
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<tr>
<td>Income to Net Cash Provided by (Used for)</td>
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<tr>
<td>Operating Activities:</td>
<td></td>
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<tr>
<td>Depreciation</td>
<td>2,127</td>
<td>10</td>
<td>—</td>
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<tr>
<td>Other</td>
<td>(288)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Change in Assets, Deferred Outflows of Resources, Liabilities, and Deferred Inflows of Resources</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Increase) Decrease in Accounts Receivable</td>
<td>(3,248)</td>
<td>7</td>
<td>(2,695)</td>
</tr>
<tr>
<td>(Increase) Decrease in Due from Other Funds</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>(Increase) Decrease in Other Assets: Due in More Than One Year</td>
<td>(333)</td>
<td>(3)</td>
<td>(8)</td>
</tr>
<tr>
<td>(Increase) Decrease in Inventory</td>
<td>1,498</td>
<td>—</td>
<td>—</td>
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<td>(Increase) Decrease in Prepaid Items</td>
<td>1,687</td>
<td>(1)</td>
<td>—</td>
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<tr>
<td>(Increase) Decrease in Deferred Outflows of Resources</td>
<td>(1,800)</td>
<td>13</td>
<td>(46)</td>
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<tr>
<td>Increase (Decrease) in Accounts Payable</td>
<td>(25,039)</td>
<td>(154)</td>
<td>(1,717)</td>
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<tr>
<td>Increase (Decrease) in Amounts Due to Other Governments</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Increase (Decrease) in Due to Other Funds</td>
<td>(20)</td>
<td>17</td>
<td>25</td>
</tr>
<tr>
<td>Increase (Decrease) in Due to External Parties (Fiduciary Funds)</td>
<td>(9)</td>
<td>(1)</td>
<td>—</td>
</tr>
<tr>
<td>Increase (Decrease) in Interfund Payables: Due Within One Year</td>
<td>5,075</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Increase (Decrease) in Unearned Revenue</td>
<td>759</td>
<td>(175)</td>
<td>—</td>
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<tr>
<td>Increase (Decrease) in Other Liabilities</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Increase (Decrease) in Claims Payable: Due Within One Year</td>
<td>—</td>
<td>1,015</td>
<td>6,235</td>
</tr>
<tr>
<td>Increase (Decrease) in Claims Payable: Due in More Than One Year</td>
<td>—</td>
<td>2,338</td>
<td>—</td>
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<tr>
<td>Increase (Decrease) in Long-term Liabilities: Due Within One Year</td>
<td>1,093</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>Increase (Decrease) in Long-term Liabilities: Due in More Than One Year</td>
<td>(6,412)</td>
<td>(81)</td>
<td>(85)</td>
</tr>
<tr>
<td>Increase (Decrease) in Deferred Inflows of Resources</td>
<td>3,260</td>
<td>22</td>
<td>76</td>
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<tr>
<td>Net Cash Provided by (Used for) Operating Activities</td>
<td>$ 179,474</td>
<td>$ 815</td>
<td>$ 8,913</td>
</tr>
</tbody>
</table>

Noncash Investing, Capital, and Financing Activities:

The following transactions occurred prior to the Statement of Net Position date:

| Installment Purchases Used to Finance Capital Assets | $ — | $ — | $ — |
| Total Noncash, Investing, Capital, and Financing Activities | $ — | $ — | $ — |

*Continued on next page*
Combining Statement of Cash Flows – Nonmajor Enterprise Funds (Continued from previous page)

For the Fiscal Year Ended June 30, 2019
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Line of Duty</th>
<th>Virginia Industries for the Blind</th>
<th>Consolidated Laboratory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reconciliation of Operating Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>To Net Cash Provided by (Used for) Operating Activities:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Income (Loss)</td>
<td>$ (44)</td>
<td>$ 1,183</td>
</tr>
<tr>
<td><strong>Adjustments to Reconcile Operating Income to Net Cash Provided by (Used for) Operating Activities:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation</td>
<td>—</td>
<td>436</td>
</tr>
<tr>
<td>Other</td>
<td>(84)</td>
<td>(411)</td>
</tr>
<tr>
<td><strong>Change in Assets, Deferred Outflows of Resources, Liabilities, and Deferred Inflows of Resources:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Increase) Decrease in Accounts Receivable</td>
<td>175</td>
<td>101</td>
</tr>
<tr>
<td>(Increase) Decrease in Due from Other Funds</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>(Increase) Decrease in Other Assets: Due in More Than One Year</td>
<td>—</td>
<td>(12)</td>
</tr>
<tr>
<td>(Increase) Decrease in Inventory</td>
<td>—</td>
<td>(2,099)</td>
</tr>
<tr>
<td>(Increase) Decrease in Prepaid Items</td>
<td>—</td>
<td>(1)</td>
</tr>
<tr>
<td>(Increase) Decrease in Deferred Outflows of Resources</td>
<td>—</td>
<td>81</td>
</tr>
<tr>
<td>Increase (Decrease) in Accounts Payable</td>
<td>(153)</td>
<td>675</td>
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<td>Increase (Decrease) in Amounts Due to Other Governments</td>
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<td>Increase (Decrease) in Due to Other Funds</td>
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<tr>
<td>Increase (Decrease) in Due to External Parties (Fiduciary Funds)</td>
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<td>9</td>
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<tr>
<td>Increase (Decrease) in Interfund Payables: Due Within One Year</td>
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</tr>
<tr>
<td>Increase (Decrease) in Unearned Revenue</td>
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<td>—</td>
</tr>
<tr>
<td>Increase (Decrease) in Other Liabilities</td>
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<tr>
<td>Increase (Decrease) in Claims Payable: Due Within One Year</td>
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<td>Increase (Decrease) in Claims Payable: Due in More Than One Year</td>
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<td>Increase (Decrease) in Long-term Liabilities: Due Within One Year</td>
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<td>Increase (Decrease) in Long-term Liabilities: Due in More Than One Year</td>
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<td>Increase (Decrease) in Deferred Inflows of Resources</td>
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<tr>
<td><strong>Net Cash Provided by (Used for) Operating Activities</strong></td>
<td>$ (800)</td>
<td>$ (68)</td>
</tr>
</tbody>
</table>

<p>| <strong>Noncash Investing, Capital, and Financing Activities:</strong> | | |
| The following transactions occurred prior to the Statement of Net Position date: | | |
| Installment Purchases Used to Finance Capital Assets | $ | — | — | $ 570 |
| <strong>Total Noncash, Investing, Capital, and Financing Activities</strong> | $ | — | — | $ 570 |</p>
<table>
<thead>
<tr>
<th>eVA Procurement System</th>
<th>Department of Environmental Quality</th>
<th>Wireless E-911 Service Board</th>
<th>Virginia Museum of Fine Arts</th>
<th>Science Museum of Virginia</th>
<th>Behavioral Health Local Funds</th>
<th>Total</th>
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</thead>
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<tr>
<td>$ 640</td>
<td>$ 1,806</td>
<td>$ 18,779</td>
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<td>4,588</td>
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<td>$ 1,319</td>
<td>$ 18,754</td>
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<td>$ 103</td>
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<td>$ 211,537</td>
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<td>$ 570</td>
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</table>
Internal Service Funds

Internal Service Funds account for the operations of state agencies that render services to other state agencies, institutions, or other governmental units of the Commonwealth on a cost-reimbursement basis.

Virginia Information Technologies Agency accounts for the installation and maintenance of the state government's telephone system; the development, use and maintenance of the Commonwealth's data processing systems; and the development of automated systems.

Enterprise Application accounts for the development and operation of the Commonwealth's Performance Budgeting System, Cardinal Financial System, and Human Capital Management Replacement Project. Funding is derived from charges to agencies for the ongoing costs of the Commonwealth's enterprise applications, including recovery of the development and implementation costs initially funded through working capital advances.

Virginia Correctional Enterprises accounts for the manufacturing activities of the Commonwealth's correctional facilities.

Health Care accounts for the health insurance programs provided to state employees and for retirees who are not yet eligible to participate in Medicare.

Line of Duty accounts for the disability, death, and health benefits provided to eligible state employees and their family members.

Fleet Management accounts for the Commonwealth's motor vehicle pool.

Property Management accounts for real estate services, non-routine facility maintenance, and the disposal of state-owned property.

Personnel Management Information accounts for the personnel, compensation and health benefits database.

Risk Management accounts for the insurance programs provided to state agencies and institutions.

General Services accounts for a variety of services, including the purchase of supplies, the sale of surplus property, water testing, graphic design and engineering.

Payroll Service Bureau accounts for the payroll and leave accounting services provided to state agencies and institutions.
Combining Statement of Fund Net Position – Internal Service Funds

June 30, 2019
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Assets and Deferred Outflows of Resources</th>
<th>Virginia Information Technologies Agency</th>
<th>Enterprise Application</th>
<th>Virginia Correctional Enterprises</th>
<th>Health Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Assets:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and Cash Equivalents</td>
<td>$ 87,677</td>
<td>$ 6,193</td>
<td>$ 3,800</td>
<td>$ 497,005</td>
</tr>
<tr>
<td>Receivables, Net</td>
<td>1,835</td>
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<td>1,698</td>
<td>28,916</td>
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<td>Due From Other Funds</td>
<td>27,930</td>
<td>—</td>
<td>769</td>
<td>34,026</td>
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<tr>
<td>Due From External Parties (Fiduciary Funds)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>247</td>
</tr>
<tr>
<td>Due From Component Units</td>
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<td>—</td>
<td>—</td>
<td>30,391</td>
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<tr>
<td>Inventory</td>
<td>—</td>
<td>—</td>
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<td>Prepaid Items</td>
<td>11,119</td>
<td>3</td>
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<tr>
<td>Other Assets</td>
<td>29,733</td>
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<td>1,561</td>
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<td>Total Current Assets</td>
<td>158,294</td>
<td>6,196</td>
<td>20,661</td>
<td>590,585</td>
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<tr>
<td>Noncurrent Assets:</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Assets</td>
<td>777</td>
<td>127</td>
<td>495</td>
<td>115</td>
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<td>Nondepreciable Capital Assets</td>
<td>—</td>
<td>33,122</td>
<td>382</td>
<td>—</td>
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<td>Depreciable Capital Assets, Net</td>
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<td>56,751</td>
<td>7,940</td>
<td>—</td>
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<tr>
<td>Total Noncurrent Assets</td>
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<td>90,000</td>
<td>8,817</td>
<td>115</td>
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<td>Total Assets</td>
<td>165,438</td>
<td>96,196</td>
<td>29,478</td>
<td>590,700</td>
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<td>Deferred Outflows of Resources</td>
<td>2,991</td>
<td>567</td>
<td>3,342</td>
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<td>Total Assets and Deferred Outflows of Resources</td>
<td>168,429</td>
<td>96,763</td>
<td>32,820</td>
<td>591,294</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities and Deferred Inflows of Resources</th>
<th>Virginia Information Technologies Agency</th>
<th>Enterprise Application</th>
<th>Virginia Correctional Enterprises</th>
<th>Health Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Liabilities:</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Accounts Payable</td>
<td>37,282</td>
<td>6,048</td>
<td>4,267</td>
<td>37,209</td>
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<tr>
<td>Amounts Due to Other Governments</td>
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<td>—</td>
<td>—</td>
<td>—</td>
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<tr>
<td>Due to Other Funds</td>
<td>104</td>
<td>162</td>
<td>166</td>
<td>57</td>
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<tr>
<td>Due to External Parties (Fiduciary Funds)</td>
<td>134</td>
<td>23</td>
<td>82</td>
<td>24</td>
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<tr>
<td>Interfund Payable</td>
<td>81,774</td>
<td>8,719</td>
<td>—</td>
<td>—</td>
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<td>Unearned Revenue</td>
<td>46,602</td>
<td>—</td>
<td>2,477</td>
<td>—</td>
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<tr>
<td>Obligations Under Securities Lending Program</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>37,440</td>
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<td>Other Liabilities</td>
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<td>—</td>
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<td>—</td>
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<tr>
<td>Claims Payable Due Within One Year</td>
<td>1,199</td>
<td>236</td>
<td>143</td>
<td>286</td>
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<td>Total Current Liabilities</td>
<td>167,095</td>
<td>15,188</td>
<td>7,135</td>
<td>206,400</td>
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<tr>
<td>Noncurrent Liabilities:</td>
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<td></td>
<td></td>
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<tr>
<td>Interfund Payable</td>
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<td>92,772</td>
<td>—</td>
<td>—</td>
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<tr>
<td>Claims Payable Due In More Than One Year</td>
<td>—</td>
<td>—</td>
<td>—</td>
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<tr>
<td>Long-term Liabilities Due in More Than One Year</td>
<td>23,319</td>
<td>3,502</td>
<td>17,810</td>
<td>3,475</td>
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<tr>
<td>Total Noncurrent Liabilities</td>
<td>23,319</td>
<td>96,274</td>
<td>17,810</td>
<td>3,475</td>
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<tr>
<td>Total Liabilities</td>
<td>190,414</td>
<td>111,462</td>
<td>24,945</td>
<td>209,875</td>
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<td>Deferred Inflows of Resources</td>
<td>4,356</td>
<td>543</td>
<td>2,627</td>
<td>507</td>
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<tr>
<td>Total Liabilities and Deferred Inflows of Resources</td>
<td>194,770</td>
<td>112,005</td>
<td>27,572</td>
<td>210,382</td>
</tr>
</tbody>
</table>

| Net Position                               |                                          |                        |                                  |             |
| Net Investment in Capital Assets           | 6,367                                    | 89,873                 | 8,322                            | —           |
| Restricted for Net Other Postemployment Benefit - Virginia Sickness and Disability Program | 657 | 107 | 385 | 88 |
| Unrestricted                               | (33,365)                                 | (105,222)              | (3,459)                          | 380,824     |
| Total Net Position (Deficit)               | $ (26,341)                               | $ (15,242)             | $ 5,248                          | $ 380,912   |
|--------------|------------------|---------------------|----------------------------------|----------------|-----------------|-----------------------|-------|
| $ 1,102 $ 5,506 $ 33,044 $ 578 $ 245,319 $ 7,155 $ 579 $ 887,958 |
| 252 1,361 51 — 173 1,250 — 35,536 |
| — 2,027 3,922 — — 1,800 — 70,474 |
| — — — — — — — 247 |
| — 22 413 — — 3,813 — 17,081 |
| — — 364 — 462 — 111 12,059 |
| — — — — — — — 31,294 |
| 1,354 8,916 37,794 578 245,954 14,018 690 1,085,040 |
| — 40 434 30 75 256 74 2,423 |
| — — — — 127 150 — 33,781 |
| — 40,478 14,546 — 39 2,985 72 129,178 |
| — 40,518 14,980 30 241 3,391 146 165,382 |
| 1,354 49,434 52,774 608 246,195 17,409 836 1,250,422 |
| — 117 1,487 137 325 854 325 10,739 |
| 1,354 49,551 54,261 745 246,520 18,263 1,161 1,261,161 |
| 32 1,106 3,096 60 2,053 2,535 80 93,768 |
| — — 40 — — — 11 40 |
| — 110 774 4 19 845 11 2,252 |
| — 7 80 6 14 49 12 431 |
| — — — — 1,208 — — 91,701 |
| — — 25,635 — 30,468 29 — 105,211 |
| 83 — — — 18,330 — — 55,853 |
| — — — — — 23 — 23 |
| 618 — — — — — — 206,323 |
| — 4,824 2,904 16 169 585 83 10,445 |
| 733 6,047 32,529 86 126,582 4,066 186 566,047 |
| — — — — 10,129 — — 102,901 |
| — — — — 677,648 — — 677,648 |
| — 21,401 39,157 960 2,331 9,089 2,900 123,944 |
| — 21,401 39,157 960 690,108 9,089 2,900 904,493 |
| 733 27,448 71,686 1,046 816,690 13,155 3,086 1,470,540 |
| — 176 2,473 111 360 1,369 361 12,883 |
| 733 27,624 74,159 1,157 817,050 14,524 3,447 1,483,423 |
| — 15,750 (261) — 166 2,574 72 122,863 |
| — 35 372 24 61 219 63 2,011 |
| 621 6,142 (20,009) (436) (570,757) 946 (2,421) (347,136) |
| $ 621 $ 21,927 $ (19,898) $ (412) $ (570,530) $ 3,739 $ (2,286) $ (222,262) |
## Combining Statement of Revenues, Expenses, and Changes in Fund Net Position – Internal Service Funds

For the Fiscal Year Ended June 30, 2019  
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Virginia Information Technologies Agency</th>
<th>Enterprise Application</th>
<th>Virginia Correctional Enterprises</th>
<th>Health Care</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating Revenues</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charges for Sales and Services $</td>
<td>441,181</td>
<td>31,528</td>
<td>45,103</td>
</tr>
<tr>
<td>Total Operating Revenues</td>
<td>441,181</td>
<td>31,528</td>
<td>45,103</td>
</tr>
<tr>
<td><strong>Operating Expenses</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of Sales and Services</td>
<td>—</td>
<td>—</td>
<td>34,162</td>
</tr>
<tr>
<td>Prizes and Claims</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Personal Services</td>
<td>17,426</td>
<td>3,191</td>
<td>7,612</td>
</tr>
<tr>
<td>Contractual Services</td>
<td>351,558</td>
<td>31,224</td>
<td>2,345</td>
</tr>
<tr>
<td>Supplies and Materials</td>
<td>26</td>
<td>20</td>
<td>538</td>
</tr>
<tr>
<td>Depreciation</td>
<td>3,550</td>
<td>8,805</td>
<td>918</td>
</tr>
<tr>
<td>Rent, Insurance, and Other Related Charges</td>
<td>22,180</td>
<td>552</td>
<td>521</td>
</tr>
<tr>
<td>Interest Expense</td>
<td>—</td>
<td>44</td>
<td>—</td>
</tr>
<tr>
<td>Other</td>
<td>1,550</td>
<td>16</td>
<td>82</td>
</tr>
<tr>
<td>Total Operating Expenses</td>
<td>396,290</td>
<td>43,852</td>
<td>46,178</td>
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<tr>
<td>Operating Income (Loss)</td>
<td>44,891</td>
<td>(12,324)</td>
<td>(1,075)</td>
</tr>
<tr>
<td><strong>Nonoperating Revenues (Expenses)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest, Dividends, Rents, and Other Investment Income</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>—</td>
<td>(69)</td>
</tr>
<tr>
<td>Total Nonoperating Revenues (Expenses)</td>
<td>7</td>
<td>—</td>
<td>(69)</td>
</tr>
<tr>
<td>Income (Loss) Before Transfers</td>
<td>44,898</td>
<td>(12,324)</td>
<td>(1,144)</td>
</tr>
<tr>
<td>Transfers In</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Transfers Out</td>
<td>—</td>
<td>(27)</td>
<td>(898)</td>
</tr>
<tr>
<td>Change in Net Position</td>
<td>44,898</td>
<td>(12,351)</td>
<td>(2,042)</td>
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<tr>
<td>Total Net Position (Deficit), July 1</td>
<td>71,239</td>
<td>(2,891)</td>
<td>7,290</td>
</tr>
<tr>
<td>Total Net Position (Deficit), June 30</td>
<td>(26,341)</td>
<td>(15,242)</td>
<td>5,248</td>
</tr>
<tr>
<td>--------------</td>
<td>------------------</td>
<td>---------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>$ 7,265</td>
<td>$ 18,548</td>
<td>$ 104,028</td>
<td>$ 1,770</td>
</tr>
<tr>
<td>7,265</td>
<td>18,548</td>
<td>104,028</td>
<td>1,770</td>
</tr>
<tr>
<td>—</td>
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<td>—</td>
<td>—</td>
</tr>
<tr>
<td>6,653</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>—</td>
<td>921</td>
<td>10,979</td>
<td>616</td>
</tr>
<tr>
<td>344</td>
<td>4,311</td>
<td>14,125</td>
<td>700</td>
</tr>
<tr>
<td>—</td>
<td>3,292</td>
<td>2,957</td>
<td>19</td>
</tr>
<tr>
<td>—</td>
<td>9,484</td>
<td>1,598</td>
<td>—</td>
</tr>
<tr>
<td>—</td>
<td>1,005</td>
<td>70,214</td>
<td>—</td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>—</td>
<td>83</td>
<td>2,658</td>
<td>—</td>
</tr>
<tr>
<td>6,997</td>
<td>19,096</td>
<td>102,531</td>
<td>1,335</td>
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<tr>
<td>268</td>
<td>(548)</td>
<td>1,497</td>
<td>435</td>
</tr>
<tr>
<td>22</td>
<td>—</td>
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</tr>
<tr>
<td>(2)</td>
<td>1,140</td>
<td>(1,103)</td>
<td>—</td>
</tr>
<tr>
<td>20</td>
<td>1,140</td>
<td>(1,103)</td>
<td>—</td>
</tr>
<tr>
<td>288</td>
<td>592</td>
<td>394</td>
<td>435</td>
</tr>
<tr>
<td>—</td>
<td>—</td>
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</tr>
<tr>
<td>—</td>
<td>(268)</td>
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</tr>
<tr>
<td>288</td>
<td>324</td>
<td>394</td>
<td>435</td>
</tr>
<tr>
<td>333</td>
<td>21,603</td>
<td>(20,292)</td>
<td>(847)</td>
</tr>
<tr>
<td>$ 621</td>
<td>$ 21,927</td>
<td>$ (19,898)</td>
<td>$ (412)</td>
</tr>
</tbody>
</table>
## Combining Statement of Cash Flows – Internal Service Funds

For the Fiscal Year Ended June 30, 2019

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Cash Flows from Operating Activities</th>
<th>Virginia Information Technologies Agency</th>
<th>Enterprise Application</th>
<th>Virginia Correctional Enterprises</th>
<th>Health Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receipts for Sales and Services</td>
<td>$ 10,521</td>
<td>$ 2,674</td>
<td>$ 10,504</td>
<td>$ 788,070</td>
</tr>
<tr>
<td>Internal Activity-Receipts from Other Funds</td>
<td>410,344</td>
<td>28,855</td>
<td>32,783</td>
<td>823,925</td>
</tr>
<tr>
<td>Internal Activity-Payments to Other Funds</td>
<td>(3,847)</td>
<td>—</td>
<td>(669)</td>
<td>—</td>
</tr>
<tr>
<td>Payments to Suppliers for Goods and Services</td>
<td>(24,628)</td>
<td>(20)</td>
<td>(35,635)</td>
<td>—</td>
</tr>
<tr>
<td>Payments for Contractual Services</td>
<td>(352,783)</td>
<td>(29,497)</td>
<td>(2,281)</td>
<td>(75,482)</td>
</tr>
<tr>
<td>Payments for Prizes, Claims, and Loss Control</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Payments to Employees</td>
<td>(20,076)</td>
<td>(3,164)</td>
<td>(8,067)</td>
<td>(3,243)</td>
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<tr>
<td>Other Operating Expense</td>
<td>—</td>
<td>(612)</td>
<td>—</td>
<td>(436)</td>
</tr>
<tr>
<td>Net Cash Provided by (Used for) Operating Activities</td>
<td>19,531</td>
<td>(1,764)</td>
<td>(3,365)</td>
<td>99,712</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cash Flows from Noncapital Financing Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfers In from Other Funds</td>
</tr>
<tr>
<td>Transfers Out to Other Funds</td>
</tr>
<tr>
<td>Other Noncapital Financing Receipt Activities</td>
</tr>
<tr>
<td>Other Noncapital Financing Disbursement Activities</td>
</tr>
<tr>
<td>Net Cash Provided by (Used for) Noncapital Financing Activities</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cash Flows from Capital and Related Financing Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition of Capital Assets</td>
</tr>
<tr>
<td>Payment of Principal and Interest on Bonds and Notes</td>
</tr>
<tr>
<td>Proceeds from Sale of Capital Assets</td>
</tr>
<tr>
<td>Net Cash Used for Capital and Related Financing Activities</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cash Flows from Investing Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment Income on Cash, Cash Equivalents, and Investments</td>
</tr>
<tr>
<td>Net Cash Provided by Investing Activities</td>
</tr>
<tr>
<td>Net Increase (Decrease) in Cash and Cash Equivalents</td>
</tr>
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</table>

### Cash and Cash Equivalents

<table>
<thead>
<tr>
<th>Cash and Cash Equivalents, July 1</th>
<th>18,081</th>
<th>4,666</th>
<th>8,298</th>
<th>350,031</th>
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</thead>
<tbody>
<tr>
<td>Cash and Cash Equivalents, June 30</td>
<td>$87,677</td>
<td>$6,193</td>
<td>$3,800</td>
<td>$459,565</td>
</tr>
</tbody>
</table>

### Reconciliation of Cash and Cash Equivalents

<table>
<thead>
<tr>
<th>Per the Statement of Net Position:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and Cash Equivalents</td>
</tr>
<tr>
<td>Securities Lending Cash Equivalents</td>
</tr>
<tr>
<td>Cash and Cash Equivalents per the Statement of Cash Flows</td>
</tr>
<tr>
<td>----------------------</td>
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<tr>
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</tbody>
</table>

Continued on next page
Combining Statement of Cash Flows – Internal Service Funds (Continued from previous page)

For the Fiscal Year Ended June 30, 2019
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Virginia Information Technologies Agency</th>
<th>Enterprise Application</th>
<th>Virginia Correctional Enterprises</th>
<th>Health Care</th>
</tr>
</thead>
</table>

Reconciliation of Operating Income

To Net Cash Provided by (Used for)

Operating Activities:

<table>
<thead>
<tr>
<th></th>
<th>Virginia Information Technologies Agency</th>
<th>Enterprise Application</th>
<th>Virginia Correctional Enterprises</th>
<th>Health Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Income (Loss)</td>
<td>$ 44,891</td>
<td>$(12,324)</td>
<td>$(1,075)</td>
<td>$ 106,335</td>
</tr>
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</table>

Adjustments to Reconcile Operating

Income to Net Cash Provided by (Used for)

Operating Activities:

<table>
<thead>
<tr>
<th></th>
<th>Virginia Information Technologies Agency</th>
<th>Enterprise Application</th>
<th>Virginia Correctional Enterprises</th>
<th>Health Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation</td>
<td>3,550</td>
<td>8,805</td>
<td>918</td>
<td>—</td>
</tr>
<tr>
<td>Miscellaneous Nonoperating Income</td>
<td>—</td>
<td>—</td>
<td>22</td>
<td>—</td>
</tr>
<tr>
<td>Other</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

Change in Assets, Deferred Outflows of Resources, Liabilities, and

Deferred Inflows of Resources

<table>
<thead>
<tr>
<th></th>
<th>Virginia Information Technologies Agency</th>
<th>Enterprise Application</th>
<th>Virginia Correctional Enterprises</th>
<th>Health Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Increase) Decrease in Accounts Receivable</td>
<td>561</td>
<td>—</td>
<td>(913)</td>
<td>(12,530)</td>
</tr>
<tr>
<td>(Increase) Decrease in Due from Other Funds</td>
<td>(9,720)</td>
<td>—</td>
<td>241</td>
<td>(1,399)</td>
</tr>
<tr>
<td>(Increase) Decrease in Due from External Parties (Fiduciary Funds)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(15)</td>
</tr>
<tr>
<td>(Increase) Decrease in Due from Component Units</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>844</td>
</tr>
<tr>
<td>(Increase) Decrease in Other Assets: Due Within One Year</td>
<td>(16,285)</td>
<td>—</td>
<td>(785)</td>
<td>—</td>
</tr>
<tr>
<td>(Increase) Decrease in Other Assets: Due in More Than One Year</td>
<td>(46)</td>
<td>(8)</td>
<td>(67)</td>
<td>(18)</td>
</tr>
<tr>
<td>(Increase) Decrease in Inventory</td>
<td>—</td>
<td>—</td>
<td>(175)</td>
<td>—</td>
</tr>
<tr>
<td>(Increase) Decrease in Prepaid Items</td>
<td>(1,636)</td>
<td>1</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>(Increase) Decrease in Deferred Outflows of Resources</td>
<td>324</td>
<td>212</td>
<td>(671)</td>
<td>(82)</td>
</tr>
<tr>
<td>Increase (Decrease) in Accounts Payable</td>
<td>(4,177)</td>
<td>1,611</td>
<td>(649)</td>
<td>(8,717)</td>
</tr>
<tr>
<td>Increase (Decrease) in Amounts Due to Other Governments</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Increase (Decrease) in Due to Other Funds</td>
<td>(3)</td>
<td>132</td>
<td>(57)</td>
<td>40</td>
</tr>
<tr>
<td>Increase (Decrease) in Due to External Parties (Fiduciary Funds)</td>
<td>(10)</td>
<td>2</td>
<td>(19)</td>
<td>4</td>
</tr>
<tr>
<td>Increase (Decrease) in Unearned Revenue</td>
<td>4,953</td>
<td>—</td>
<td>(409)</td>
<td>—</td>
</tr>
<tr>
<td>Increase (Decrease) in Other Liabilities</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Increase (Decrease) in Claims Payable: Due Within One Year</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>15,211</td>
</tr>
<tr>
<td>Increase (Decrease) in Claims Payable: Due in More Than One Year</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Increase (Decrease) in Long-term Liabilities: Due Within One Year</td>
<td>134</td>
<td>48</td>
<td>142</td>
<td>70</td>
</tr>
<tr>
<td>Increase (Decrease) in Long-term Liabilities: Due in More Than One Year</td>
<td>(2,248)</td>
<td>(404)</td>
<td>(647)</td>
<td>(182)</td>
</tr>
<tr>
<td>Increase (Decrease) in Deferred Inflows of Resources</td>
<td>(757)</td>
<td>161</td>
<td>779</td>
<td>151</td>
</tr>
</tbody>
</table>

Net Cash Provided by (Used for) Operating Activities

<table>
<thead>
<tr>
<th></th>
<th>Virginia Information Technologies Agency</th>
<th>Enterprise Application</th>
<th>Virginia Correctional Enterprises</th>
<th>Health Care</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ 19,531</td>
<td>$(1,764)</td>
<td>$(3,365)</td>
<td>$ 99,712</td>
</tr>
</tbody>
</table>

Noncash Investing, Capital, and Financing Activities:

The following transactions occurred prior to the Statement of Net Position date:

<table>
<thead>
<tr>
<th></th>
<th>Virginia Information Technologies Agency</th>
<th>Enterprise Application</th>
<th>Virginia Correctional Enterprises</th>
<th>Health Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installment Purchases Used to Finance Capital Assets</td>
<td>$ —</td>
<td>$ —</td>
<td>$ —</td>
<td>$ —</td>
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<tr>
<td>Accounts Payable Increase (Decrease) related to Capital Assets</td>
<td>—</td>
<td>(578)</td>
<td>10</td>
<td>—</td>
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</table>

Total Noncash, Investing, Capital, and Financing Activities

<table>
<thead>
<tr>
<th></th>
<th>Virginia Information Technologies Agency</th>
<th>Enterprise Application</th>
<th>Virginia Correctional Enterprises</th>
<th>Health Care</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ —</td>
<td>$(578)</td>
<td>10</td>
<td>$ —</td>
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<td>--------------</td>
<td>-----------------</td>
<td>---------------------</td>
<td>----------------------------------</td>
<td>----------------</td>
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<tr>
<td>$</td>
<td>268</td>
<td>$ (548)</td>
<td>$ 1,497</td>
<td>$ 435</td>
</tr>
<tr>
<td>—</td>
<td>9,484</td>
<td>1,598</td>
<td>—</td>
<td>8</td>
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<td>—</td>
<td>—</td>
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<tr>
<td>83</td>
<td>—</td>
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<tr>
<td>(100)</td>
<td>(243)</td>
<td>248</td>
<td>47</td>
<td>(77)</td>
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<tr>
<td>22</td>
<td>(267)</td>
<td>(1,257)</td>
<td>—</td>
<td>3</td>
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<td>(1)</td>
<td>(30)</td>
<td>(4)</td>
<td>(10)</td>
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<td>—</td>
<td>(5)</td>
<td>(58)</td>
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<td>5</td>
<td>(17)</td>
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<td>23</td>
<td>2</td>
<td>2</td>
<td>(25)</td>
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<td>(19)</td>
<td>(988)</td>
<td>(164)</td>
<td>(19)</td>
<td>(519)</td>
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<td>(89)</td>
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<td>(1)</td>
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<td>—</td>
<td>5,887</td>
<td>—</td>
<td>(17,216)</td>
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<td>(142)</td>
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<td>133</td>
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<td>—</td>
<td>(38,959)</td>
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<td>—</td>
<td>1</td>
<td>123</td>
<td>(45)</td>
<td>28</td>
</tr>
<tr>
<td>—</td>
<td>(108)</td>
<td>(1,593)</td>
<td>(31)</td>
<td>(204)</td>
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<td>—</td>
<td>6</td>
<td>546</td>
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<td>$ 387</td>
<td>$ 7,372</td>
<td>$ 6,584</td>
<td>$ 402</td>
<td>$ (888)</td>
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<td>$</td>
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<td>$ 6,697</td>
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<tr>
<td>$</td>
<td>—</td>
<td>$ 6,697</td>
<td>$ —</td>
<td>$ —</td>
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</table>
Fiduciary Funds

Private Purpose Trust Funds

Private Purpose Trust Funds are trust arrangements that benefit individuals, private organizations, or other governments.

Invest529 accounts for program activities offered by the Virginia College Savings Plan (The Plan). The program is a defined contribution college savings program in which participants can save for qualified higher education expenses by making contributions and investments into portfolios of their choice. Eide Bailly, LLP, audits the Plan, and a separate report is issued.

Loan Servicing Reserve accounts for funds that are used to service loan activities for individual loans in order to meet the provisions of the Declarations of the dissolved Virginia Education Loan Authority.

Edvantage Reserve accounts for funds that are used to service loan activities for individual loans in order to meet the provisions of the dissolved Student Education Assistance Authority.

Virginia Revolving Farm Loan Program accounts for trust funds that are used to provide loans to individual farmers for rural rehabilitation purposes.

Gas and Oil Board Escrow Account accounts for the funds held in escrow awaiting disbursement to the validated owner of property containing gas and oil interest.

Miscellaneous Trust accounts for perpetual trusts created through donations to the state. Earnings are used for the benefit of donor-specified local entities.

Pension and Other Employee Benefit Trust Funds

Pension and Other Employee Benefit Trust Funds reflect the activities of the retirement systems and postemployment benefits administered by the Virginia Retirement System (VRS) or the Department of Human Resource Management.

The Virginia Retirement System provides retirement benefits to Commonwealth employees, teachers, political subdivision employees, and other qualifying employees.

The State Police Officers’ Retirement System provides retirement benefits to Virginia state police officers.

The Judicial Retirement System provides retirement benefits to the Commonwealth’s judiciary.

The Virginia Law Officers’ Retirement System provides retirement benefits to correctional officers, capital police officers, university police officers, and game wardens.

Political Appointees provides optional retirement benefits to selected officials and administrative staff.

The Public School Superintendents’ Plan provides retirement benefits to superintendents in the public school system.

The Virginia Supplemental Retirement Plan provides extra benefits to turn-around specialists in the public school system.

Other Postemployment Retiree Health Insurance Credit accounts for the health insurance credits provided by the Commonwealth which offset a portion of the retirees’ monthly insurance premiums.

Other Employment Group Life provides life insurance coverage to members of the retirement systems.

Other Postemployment Disability Insurance Trust provides income protection to Commonwealth employees for absences caused by sickness or disability.

Other Employment Volunteer Firefighters and Rescue Squad Workers provides optional retirement benefits to volunteer firefighters and rescue squad workers.

Other Postemployment Line of Duty Death and Disability provides death and health benefits to beneficiaries of certain law enforcement and rescue personnel disabled or killed in the line of duty.

Virginia Local Disability Program provides long-term disability benefits to local government employees of participating localities.
Investment Trust Funds

*Investment Trust Funds reflect the external portion of the local government investment pool sponsored by the Commonwealth.*

**Local Government Investment Pool (LGIP)** helps local governmental entities maximize their rate of return by commingling their resources for investment purposes.

**Local Government Investment Pool - Extended Maturity (LGIP – EM)** offers public entities of the Commonwealth the opportunity to participate in an investment vehicle which allows them to invest monies that are not needed for daily liquidity.

Agency Funds

*Agency Funds report those funds for which the Commonwealth acts solely in a custodial capacity.*

**Funds for the Collection of Taxes and Fees** account for taxes and fees collected by the Commonwealth to be distributed to localities or other states.

**Employee Benefits** accounts for undistributed withholdings for employee benefits.

**Contractor Deposits** accounts for reimbursable deposits, including both cash and securities, from mining companies, road construction companies, motor fuel retailers, localities, and toll relief, to ensure performance meets regulatory standards.

**Deposits of Insurance Carriers** accounts for security deposits of insurance carriers as protection to the policy holders of the Commonwealth, as well as funds or irrevocable letters of credit held in lieu of insurance for pilot licensure.

**Inmate and Ward** accounts for the savings of inmates and wards of the Departments of Corrections and Juvenile Justice.

**Child Support Collection** accounts for court-ordered child support payments that flow through the Department of Social Services.

**Behavioral Health Patient** accounts for the savings of patients in the Commonwealth's behavioral health facilities.

**Behavioral Health Non-patient** accounts for the savings of non-patients in the Commonwealth's behavioral health facilities.

**Comptroller's Debt Setoff** accounts for monies held in a suspense status while research is conducted to determine the party entitled to the funds.

**Legal Settlement** accounts for receipts from court judgments that are deposited and subsequently distributed to the appropriate injured parties.

**Consumer Services** accounts for deposits made by businesses that will provide assistance to individuals suffering losses associated with these businesses and will be returned after dispute resolution. The Milk Commission, which accounts for deposits from milk producers that will be distributed to individual farmers to offset delivery expenses and losses incurred, is reported as part of this fund.

**State Asset Forfeiture** accounts for seized assets that are deposited and subsequently distributed to the appropriate parties pursuant to court orders.

**Virginia School for the Deaf and the Blind** accounts for student funds used to establish new activities for students.

**Wilson Workforce and Rehabilitation Center** accounts for student funds held by the center.

**Third Party Administrator** accounts for funds held in custody for assets of the Virginia Railway Express and the van pool insurance program, as well as donations collected in conjunction with auto-replenishment of EZPass Virginia customer accounts. It also includes the Drive Smart Virginia Education Fund administered by the Department of Transportation.

**Virginia Veterans’ Care Center Resident** accounts for the savings of residents of the Virginia Veterans Care Center.

**Virginia Individual Development Account Trust** accounts for funds used to benefit low income individuals and to assist them in purchasing affordable housing.

**E-Payables** accounts for payments to vendors which are held in a suspense status until the electronic payment is processed.
### Combining Statement of Fiduciary Net Position – Private Purpose Trust Funds

June 30, 2019  
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Assets and Deferred Outflows of Resources</th>
<th>Invest529</th>
<th>Loan Servicing Reserve</th>
<th>Edvantage Reserve</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash and Cash Equivalents</strong></td>
<td>$115,795</td>
<td>$189</td>
<td>$278</td>
</tr>
<tr>
<td>Investments:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bonds and Mortgage Securities</td>
<td>128,257</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stocks</td>
<td>87,289</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Income Commingled Funds</td>
<td>815,843</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Index and Pooled Funds</td>
<td>1,908,626</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real Estate</td>
<td>117,013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mutual and Money Market Funds</td>
<td>752,114</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>1,182,257</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Investments</td>
<td>4,991,399</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Assets Held Pending Distribution</strong></td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Receivables, Net:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts</td>
<td>316</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td>Interest and Dividends</td>
<td>3,935</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td>Other Receivables</td>
<td>1,122</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td>Total Receivables</td>
<td>5,373</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td><strong>Other Assets</strong></td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total Assets</td>
<td>5,112,567</td>
<td>189</td>
<td>278</td>
</tr>
<tr>
<td><strong>Deferred Outflows of Resources</strong></td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total Assets and Deferred Outflows of Resources</td>
<td>5,112,567</td>
<td>189</td>
<td>278</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities and Deferred Inflows of Resources</th>
<th>Invest529</th>
<th>Loan Servicing Reserve</th>
<th>Edvantage Reserve</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts Payable</td>
<td>368</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Obligations Under Securities Lending</td>
<td>—</td>
<td>—</td>
<td>21</td>
</tr>
<tr>
<td>Due to Claimants, Participants, Escrows and Providers</td>
<td>6,449</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Compensated Absences Payable</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Payable for Security Transactions</td>
<td>2,082</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Net Pension Liability</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Net Other Postemployment Benefit Liability</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total Other Postemployment Benefit Liability</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td>8,899</td>
<td>—</td>
<td>21</td>
</tr>
</tbody>
</table>

| Deferred Inflows of Resources               | —         | —                      | —                 |
| **Total Liabilities and Deferred Inflows of Resources** | 8,899     | —                      | 21                |

<p>| Net Position Restricted for Participants and Other Purposes | $5,103,668 | $189 | $257 |</p>
<table>
<thead>
<tr>
<th>Virginia Revolving Farm Loan Program</th>
<th>Gas and Oil Board Escrow Account</th>
<th>Miscellaneous Trust</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 4,906</td>
<td>$ —</td>
<td>$ 66</td>
<td>$ 121,234</td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>128,257</td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>87,289</td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>815,843</td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>1,908,626</td>
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<tr>
<td>—</td>
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<td>—</td>
<td>117,013</td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>752,114</td>
</tr>
<tr>
<td>—</td>
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### Combining Statement of Changes in Fiduciary Net Position – Private Purpose Trust Funds

For the Fiscal Year Ended June 30, 2019

(Dollars in Thousands)

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Net Position Restricted for Participants and Other Purposes

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<td>Gas and Oil Board Escrow Account</td>
<td>Miscellaneous Trust</td>
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<td>4,693</td>
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<td>708,897</td>
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<td>$ 9,875</td>
<td>$ 5,118,502</td>
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</table>
### Combining Statement of Fiduciary Net Position – Pension and Other Employee Benefit Trust Funds

June 30, 2019

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Assets and Deferred Outflows of Resources</th>
<th>Virginia Retirement System</th>
<th>State Police Officers’ Retirement System</th>
<th>Judicial Retirement System</th>
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<tr>
<td>Cash and Cash Equivalents</td>
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<td>$ 3,304</td>
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<td>Bonds and Mortgage Securities</td>
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<td>167,812</td>
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<td>1,252,995</td>
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<td>9,112</td>
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<td>Index and Pooled Funds</td>
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<td>Hybrid Defined Contribution Investments</td>
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<td>Due from Other Funds</td>
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<tr>
<td>Due from Internal Parties (Governmental Funds and Business-type Activities)</td>
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<td>170</td>
<td>125</td>
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<td>Due from Component Units</td>
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<td>Furniture and Equipment</td>
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<td>Total Assets</td>
<td>85,408,487</td>
<td>955,902</td>
<td>622,174</td>
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</table>

### Deferred Outflows of Resources

| Total Assets and Deferred Outflows of Resources | 85,408,487 | 955,902 | 622,174 |

### Liabilities and Deferred Inflows of Resources

| Due to Other Funds                        | 28,576       | 252      | 163     |
| Due to Internal Parties (Governmental Funds and Business-type Activities) | 4,014         |          |         |
| Obligations Under Securities Lending     | 4,356,925    | 49,152   | 31,684  |
| Other Liabilities                        | 183,721      | 2,767    | 1,783   |
| Retirement Benefits Payable              | 405,280      | 4,977    | 3,506   |
| Refunds Payable                         | 4,308        |          |         |
| Compensated Absences Payable             | 2,758        |          |         |
| Insurance Premiums and Claims Payable    |              |          |         |
| Payable for Security Transactions        | 2,967,785    | 33,481   | 21,582  |
| Total Liabilities                        | 8,015,632    | 90,629   | 58,718  |

### Deferred Inflows of Resources

| Total Liabilities and Deferred Inflows of Resources | 8,015,632 | 90,629 | 58,718 |

Net Position Restricted for Pensions and Other Employment Benefits

$ 77,392,855 | $ 865,273 | $ 563,456
| Commonwealth of Virginia | 269 |

<table>
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<tr>
<th>Virginia Law Officers’ Retirement System</th>
<th>Other Postemployment Retiree Health Insurance Credit</th>
<th>Virginia Supplemental Retirement Plan</th>
<th>Virginia Law Officers’ Retirement System</th>
<th>Other Postemployment Disability Insurance Trust</th>
<th>Other Employment Group Life</th>
<th>Other Postemployment Disability Insurance Trust</th>
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<td>249,412</td>
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Continued on next page
## Combining Statement of Fiduciary Net Position – Pension and Other Employee Benefit Trust Funds

(Continued from previous page)

June 30, 2019

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Assets and Deferred Outflows of Resources</th>
<th>Other Employment</th>
<th>Other Employment</th>
<th>Virginia Local</th>
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<td>Hybrid Defined Contribution Investments</td>
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<td>Other Receivables</td>
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<tr>
<td>Due from Other Funds</td>
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<td>Due from Internal Parties (Governmental Funds and Business-type Activities)</td>
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<tr>
<td>Due from Component Units</td>
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<tr>
<td>Furniture and Equipment</td>
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<tr>
<td><strong>Total Assets</strong></td>
<td>4,148</td>
<td>3,113</td>
<td>4,133</td>
</tr>
<tr>
<td><strong>Deferred Outflows of Resources</strong></td>
<td>—</td>
<td>—</td>
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<tr>
<td><strong>Total Assets and Deferred Outflows of Resources</strong></td>
<td>4,148</td>
<td>3,113</td>
<td>4,133</td>
</tr>
</tbody>
</table>

| Liabilities and Deferred Inflows of Resources |            |            |            |
|                                              | Other Employment | Other Employment | Virginia Local |
|                                              | Volunteer        | Postemployment   | Disability Program |
|                                              | Firefighters and Rescue Squad Workers | Line of Duty Death and Disability | |
| Accounts Payable                           | —                | 1               | 1             |
| Due to Other Funds                         | —                | —                | —             |
| Due to Internal Parties (Governmental Funds and Business-type Activities) | — | — | — |
| Obligations Under Securities Lending       | —                | 157              | 188           |
| Other Liabilities                          | —                | 8                | 193           |
| Retirement Benefits Payable                | —                | —                | —             |
| Refunds Payable                           | —                | —                | —             |
| Compensated Absences Payable               | —                | —                | —             |
| Insurance Premiums and Claims Payable      | —                | —                | —             |
| Payable for Security Transactions          | —                | 107              | 128           |
| **Total Liabilities**                      | —                | 273              | 510           |
| **Deferred Inflows of Resources**          | —                | —                | —             |
| **Total Liabilities and Deferred Inflows of Resources** | — | 273 | 510 |

| Net Position Restricted for Pensions and Other Employment Benefits | $ 4,148 | $ 2,840 | $ 3,623 |

Commonwealth of Virginia
<table>
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<td>4,780,395</td>
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<td>995,675</td>
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<td><strong>Total</strong></td>
<td><strong>91,529,372</strong></td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>91,529,372</strong></td>
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<td>4,014</td>
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<td>62,265</td>
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<td>4,467</td>
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<td><strong>Total</strong></td>
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<td><strong>Total</strong></td>
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<td><strong>Total</strong></td>
<td><strong>82,866,214</strong></td>
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## Combining Statement of Changes in Fiduciary Net Position – Pension and Other Employee Benefit Trust Funds

For the Fiscal Year Ended June 30, 2019  
(Dollars in Thousands)

<table>
<thead>
<tr>
<th></th>
<th>Virginia Retirement System</th>
<th>State Police Officers’ Retirement System</th>
<th>Judicial Retirement System</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Additions:</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Investment Income:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest, Dividends, and Other Investment Income</td>
<td>$5,448,586</td>
<td>$60,990</td>
<td>$39,721</td>
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<tr>
<td><strong>Total Investment Income</strong></td>
<td>$5,448,586</td>
<td>$60,990</td>
<td>$39,721</td>
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<tr>
<td>Less Investment Expenses</td>
<td>550,279</td>
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<td><strong>Net Investment Income</strong></td>
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<td><strong>Contributions:</strong></td>
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<td>Employer</td>
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<td>23,490</td>
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<td><strong>Total Contributions</strong></td>
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<td><strong>Total Additions</strong></td>
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<td><strong>Deductions:</strong></td>
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<td>Retirement Benefits</td>
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<td>62,683</td>
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<tr>
<td>Retiree Health Insurance Credits</td>
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<tr>
<td>Insurance Premiums and Claims</td>
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<td>Administrative Expenses</td>
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<td>Other Expenses</td>
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<td>Long-term Disability Benefits</td>
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<td><strong>Total Deductions</strong></td>
<td>4,944,701</td>
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<td><strong>Net Increase</strong></td>
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### Net Position Restricted for Pensions and Other Employment Benefits

<table>
<thead>
<tr>
<th></th>
<th>Virginia Retirement System</th>
<th>State Police Officers’ Retirement System</th>
<th>Judicial Retirement System</th>
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<tbody>
<tr>
<td><strong>July 1</strong></td>
<td>74,084,142</td>
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<td><strong>$ 865,273</strong></td>
<td><strong>$ 563,456</strong></td>
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<td>Virginia Law Officers’ Retirement System</td>
<td>Political Appointees</td>
<td>Public School Superintendents’ Plan</td>
<td>Virginia Supplemental Retirement Plan</td>
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<td>$1,495,990</td>
<td>$17,101</td>
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Continued on next page
Combining Statement of Changes in Fiduciary Net Position – Pension and Other Employee Benefit Trust Funds

(Continued from previous page)

For the Fiscal Year Ended June 30, 2019

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Additions:</th>
<th>Other Employment Volunteer Firefighters and Rescue Squad Workers</th>
<th>Other Postemployment Line of Duty Death and Disability</th>
<th>Virginia Local Disability Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment Income:</td>
<td></td>
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<td></td>
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<tr>
<td>Interest, Dividends, and Other Investment Income</td>
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<td>$ 348</td>
<td>$ 192</td>
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<td>192</td>
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<td>13,377</td>
<td>4,192</td>
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<td>4,192</td>
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<td>Retirement Benefits</td>
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<td>—</td>
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</tr>
<tr>
<td>Refunds to Former Members</td>
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<tr>
<td>Retiree Health Insurance Credits</td>
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<td>Insurance Premiums and Claims</td>
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<td>Other Expenses</td>
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<td>—</td>
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<tr>
<td>Long-term Disability Benefits</td>
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<td>Total Deductions</td>
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<td>Net Increase</td>
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<td>967</td>
<td>2,160</td>
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Net Position Restricted for Pensions and Other Employment Benefits

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<tr>
<th></th>
<th>Other Employment Volunteer Firefighters and Rescue Squad Workers</th>
<th>Other Postemployment Line of Duty Death and Disability</th>
<th>Virginia Local Disability Program</th>
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<tbody>
<tr>
<td>July 1</td>
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<td>1,873</td>
<td>1,463</td>
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<td>June 30</td>
<td>$ 4,148</td>
<td>$ 2,840</td>
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<td>5,832,684</td>
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<td>4,107</td>
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<td>3,661,343</td>
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<tr>
<td></td>
<td>79,204,871</td>
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<td>79,204,871</td>
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<tr>
<td>Total</td>
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<td>$82,866,214</td>
</tr>
</tbody>
</table>
### Combining Statement of Fiduciary Net Position – Investment Trust Funds

**June 30, 2019**

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Assets and Deferred Outflows of Resources</th>
<th>Local Government Investment Pool (LGIP)</th>
<th>Local Government Investment Pool - Extended Maturity (LGIP-EM)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash and Cash Equivalents</strong></td>
<td>$2,724,454</td>
<td>$1,420</td>
<td>$2,725,874</td>
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<td><strong>Investments:</strong></td>
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<tr>
<td>Bonds and Mortgage Securities</td>
<td>73,871</td>
<td>34,738</td>
<td>108,609</td>
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<td>Short-term Investments</td>
<td>2,510,947</td>
<td>70,927</td>
<td>2,581,874</td>
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<tr>
<td><strong>Total Investments</strong></td>
<td>2,584,818</td>
<td>105,665</td>
<td>2,690,483</td>
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<td><strong>Receivables, Net:</strong></td>
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<td></td>
</tr>
<tr>
<td>Interest and Dividends</td>
<td>8,736</td>
<td>738</td>
<td>9,474</td>
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<tr>
<td><strong>Total Receivables</strong></td>
<td>8,736</td>
<td>738</td>
<td>9,474</td>
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<tr>
<td>Due From Other Funds</td>
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<td>10,453</td>
<td>10,453</td>
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<tr>
<td><strong>Total Assets</strong></td>
<td>5,318,008</td>
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<td><strong>Deferred Outflows of Resources</strong></td>
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</tr>
<tr>
<td><strong>Total Assets and Deferred Outflows of Resources</strong></td>
<td>5,318,008</td>
<td>118,276</td>
<td>5,436,284</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities and Deferred Inflows of Resources</th>
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<tbody>
<tr>
<td><strong>Due to Other Funds</strong></td>
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</tr>
<tr>
<td><strong>Due to Internal Parties (Governmental Funds and Business-type Activities)</strong></td>
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<td><strong>Total Liabilities</strong></td>
<td>10,455</td>
<td>10,455</td>
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<tr>
<td><strong>Deferred Inflows of Resources</strong></td>
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</tr>
<tr>
<td><strong>Total Liabilities and Deferred Inflows of Resources</strong></td>
<td>10,455</td>
<td>10,455</td>
</tr>
</tbody>
</table>

| Net Position Restricted for Pool Participants | $5,307,553 | $118,276 | $5,425,829 |
## Combining Statement of Changes in Fiduciary Net Position - Investment Trust Funds

For the Fiscal Year Ended June 30, 2019

(Dollars in Thousands)

<table>
<thead>
<tr>
<th></th>
<th>Local Government Investment Pool (LGIP)</th>
<th>Local Government Investment Pool - Extended Maturity (LGIP-EM)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Additions:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Investment Income:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest, Dividends, and Other Investment Income</td>
<td>$ 81,506</td>
<td>$ 3,506</td>
<td>$ 85,012</td>
</tr>
<tr>
<td><strong>Distributions to Shareholders from Net Investment Income</strong></td>
<td>(81,506)</td>
<td>(3,506)</td>
<td>(85,012)</td>
</tr>
<tr>
<td><strong>Total Investment Income</strong></td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Net Investment Income</strong></td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Shares Sold</td>
<td>7,787,259</td>
<td>17,783</td>
<td>7,805,042</td>
</tr>
<tr>
<td>Reinvested Distributions</td>
<td>81,422</td>
<td>3,388</td>
<td>84,810</td>
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<tr>
<td><strong>Total Additions</strong></td>
<td>7,868,681</td>
<td>21,171</td>
<td>7,889,852</td>
</tr>
<tr>
<td><strong>Deductions:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shares Redeemed</td>
<td>6,523,121</td>
<td>22,065</td>
<td>6,545,186</td>
</tr>
<tr>
<td><strong>Total Deductions</strong></td>
<td>6,523,121</td>
<td>22,065</td>
<td>6,545,186</td>
</tr>
<tr>
<td>Net Increase/Decrease</td>
<td>1,345,560</td>
<td>(894)</td>
<td>1,344,666</td>
</tr>
<tr>
<td><strong>Net Position Restricted for Pool Participants</strong></td>
<td>3,961,993</td>
<td>119,170</td>
<td>4,081,163</td>
</tr>
<tr>
<td><strong>June 30</strong></td>
<td>$ 5,307,553</td>
<td>$ 118,276</td>
<td>$ 5,425,829</td>
</tr>
</tbody>
</table>
## Combining Statement of Fiduciary Net Position – Agency Funds

**June 30, 2019**

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Assets</th>
<th>Funds for the Collection of Taxes and Fees</th>
<th>Employee Benefits</th>
<th>Contractor Deposits</th>
<th>Deposits of Insurance Carriers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and Cash Equivalents</td>
<td>$226,235</td>
<td>$5,389</td>
<td>$39,097</td>
<td>$262</td>
</tr>
<tr>
<td>Assets Held Pending Distribution</td>
<td>—</td>
<td>—</td>
<td>9,088</td>
<td>450,356</td>
</tr>
<tr>
<td>Receivables, Net:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts</td>
<td>61,012</td>
<td>—</td>
<td>—</td>
<td>84</td>
</tr>
<tr>
<td>Total Receivables</td>
<td>61,012</td>
<td>—</td>
<td>—</td>
<td>84</td>
</tr>
<tr>
<td>Other Assets</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$287,247</td>
<td>$5,389</td>
<td>$48,185</td>
<td>$450,702</td>
</tr>
</tbody>
</table>

<p>| Liabilities | | | | |
| Accounts Payable | $ | — | $5,389 | — | $ — |
| Amounts Due to Other Governments | 283,329 | — | — | — |
| Due to Internal Parties (Governmental Funds and Business-type Activities) | 3,771 | — | — | — |
| Obligations Under Securities Lending Program | 147 | — | 794 | — |
| Due to Claimants, Participants, Escrows and Providers | — | — | — | — |
| Other Liabilities | — | — | 47,391 | 450,702 |
| Insurance Premiums and Claims Payable | — | — | — | — |
| Total Liabilities | $287,247 | $5,389 | $48,185 | $450,702 |</p>
<table>
<thead>
<tr>
<th>Inmate and Ward</th>
<th>Child Support Collection</th>
<th>Behavioral Health Patient</th>
<th>Behavioral Health Non-Patient</th>
<th>Comptroller’s Debt Setoff</th>
<th>Legal Settlement</th>
<th>Consumer Services</th>
<th>State Asset Forfeiture</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 22,563</td>
<td>$ 14,441</td>
<td>$ 758</td>
<td>$ 43</td>
<td>$ 785</td>
<td>$ 4,076</td>
<td>$ 1,291</td>
<td>$ 3,230</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>510</td>
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<tr>
<td>510</td>
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</tr>
<tr>
<td>$ 23,073</td>
<td>$ 14,441</td>
<td>$ 758</td>
<td>$ 43</td>
<td>$ 785</td>
<td>$ 4,076</td>
<td>$ 1,291</td>
<td>$ 3,230</td>
</tr>
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<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>$ 3,307</td>
<td>$ —</td>
<td>$ —</td>
<td>$ —</td>
<td>$ —</td>
<td>$ —</td>
<td>$ 1</td>
<td>$ —</td>
</tr>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>245</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>18,896</td>
<td>$ 14,441</td>
<td>$ 758</td>
<td>$ 43</td>
<td>$ 159</td>
<td>$ 241</td>
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<td></td>
</tr>
<tr>
<td>625</td>
<td>$ —</td>
<td>$ —</td>
<td>$ 785</td>
<td>$ 3,917</td>
<td>$ 1,290</td>
<td>$ 2,989</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$ 23,073</td>
<td>$ 14,441</td>
<td>$ 758</td>
<td>$ 43</td>
<td>$ 785</td>
<td>$ 4,076</td>
<td>$ 1,291</td>
<td>$ 3,230</td>
</tr>
</tbody>
</table>

*Continued on next page*
## Combining Statement of Fiduciary Net Position – Agency Funds (Continued from previous page)

**June 30, 2019**  
(Dollars in Thousands)

<table>
<thead>
<tr>
<th></th>
<th>Virginia School for the Deaf and Blind</th>
<th>Wilson Workforce and Rehabilitation Center</th>
<th>Third Party Administrator</th>
<th>Virginia Veterans’ Care Center Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and Cash Equivalents</td>
<td>$ 18</td>
<td>$ 7</td>
<td>$ 14,102</td>
<td>$ 208</td>
</tr>
<tr>
<td>Assets Held Pending Distribution</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Receivables, Net:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts</td>
<td>—</td>
<td>—</td>
<td>80</td>
<td>—</td>
</tr>
<tr>
<td>Total Receivables</td>
<td>—</td>
<td>—</td>
<td>80</td>
<td>—</td>
</tr>
<tr>
<td>Other Assets</td>
<td>—</td>
<td>—</td>
<td>35</td>
<td>—</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$ 18</td>
<td>$ 7</td>
<td>$ 14,217</td>
<td>$ 208</td>
</tr>
<tr>
<td><strong>Liabilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts Payable</td>
<td>$ —</td>
<td>$ —</td>
<td>$ 301</td>
<td>$ —</td>
</tr>
<tr>
<td>Amounts Due to Other Governments</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Due to Internal Parties (Governmental Funds and Business-type Activities)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Obligations Under Securities Lending Program</td>
<td>—</td>
<td>—</td>
<td>1,062</td>
<td>—</td>
</tr>
<tr>
<td>Due to Claimants, Participants, Escrows and Providers</td>
<td>18</td>
<td>7</td>
<td>12,479</td>
<td>208</td>
</tr>
<tr>
<td>Other Liabilities</td>
<td>—</td>
<td>—</td>
<td>2</td>
<td>—</td>
</tr>
<tr>
<td>Insurance Premiums and Claims Payable</td>
<td>—</td>
<td>—</td>
<td>373</td>
<td>—</td>
</tr>
<tr>
<td>Total Liabilities</td>
<td>$ 18</td>
<td>$ 7</td>
<td>$ 14,217</td>
<td>$ 208</td>
</tr>
<tr>
<td>Virginia Individual Development Account Trust</td>
<td>E-Payables</td>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>------------</td>
<td>-------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$</td>
<td>— $ 32,455</td>
<td>$ 364,960</td>
<td></td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>459,444</td>
<td></td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>61,686</td>
<td></td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>61,686</td>
<td></td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$</td>
<td>— $ 32,455</td>
<td>$ 886,125</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$</td>
<td>— $ —</td>
<td>$ 8,998</td>
<td></td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>283,329</td>
<td></td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>4,016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>2,403</td>
<td></td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>46,850</td>
<td></td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>— $ 32,455</td>
<td>540,156</td>
<td></td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>373</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$</td>
<td>— $ 32,455</td>
<td>$ 886,125</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Combining Statement of Changes in Assets and Liabilities – Agency Funds

For the Fiscal Year Ended June 30, 2019

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Funds for the Collection of Taxes and Fees</th>
<th>Balance July 1</th>
<th>Additions</th>
<th>Deletions</th>
<th>Balance June 30</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets:</strong></td>
<td>$198,072</td>
<td>$1,481,516</td>
<td>$1,453,353</td>
<td>$226,235</td>
</tr>
<tr>
<td>Cash and Cash Equivalents</td>
<td>62,530</td>
<td>61,012</td>
<td>62,530</td>
<td>61,012</td>
</tr>
<tr>
<td>Due from Internal Parties (Governmental Funds and Business-type Activities)</td>
<td>16,732</td>
<td>—</td>
<td>16,732</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td>$277,334</td>
<td>$1,542,528</td>
<td>$1,532,615</td>
<td>$287,247</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities:</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amounts Due to Other Governments</strong></td>
<td>$277,245</td>
<td>$1,538,610</td>
<td>$1,532,526</td>
<td>$283,329</td>
</tr>
<tr>
<td>Due to Internal Parties (Governmental Funds and Business-type Activities)</td>
<td>—</td>
<td>3,771</td>
<td>—</td>
<td>3,771</td>
</tr>
<tr>
<td>Obligations Under Securities Lending Program</td>
<td>89</td>
<td>147</td>
<td>89</td>
<td>147</td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td>$277,334</td>
<td>$1,542,528</td>
<td>$1,532,615</td>
<td>$287,247</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Employee Benefits</strong></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets:</strong></td>
<td>$5,535</td>
<td>$242,080</td>
<td>$242,226</td>
<td>$5,389</td>
</tr>
<tr>
<td>Cash and Cash Equivalents</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td>$5,535</td>
<td>$242,080</td>
<td>$242,226</td>
<td>$5,389</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities:</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts Payable</td>
<td>$5,535</td>
<td>$242,080</td>
<td>$242,226</td>
<td>$5,389</td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td>$5,535</td>
<td>$242,080</td>
<td>$242,226</td>
<td>$5,389</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Contractor Deposits</strong></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets:</strong></td>
<td>$36,104</td>
<td>$15,230</td>
<td>$12,237</td>
<td>$39,097</td>
</tr>
<tr>
<td>Cash and Cash Equivalents</td>
<td>12,786</td>
<td>1,477</td>
<td>5,175</td>
<td>9,088</td>
</tr>
<tr>
<td>Assets Held Pending Distribution</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td>$48,890</td>
<td>$16,707</td>
<td>$17,412</td>
<td>$48,185</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities:</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts Payable</td>
<td>$119</td>
<td>—</td>
<td>119</td>
<td>—</td>
</tr>
<tr>
<td>Obligations Under Securities Lending Program</td>
<td>674</td>
<td>794</td>
<td>674</td>
<td>794</td>
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<tr>
<td>Other Liabilities</td>
<td>48,097</td>
<td>15,913</td>
<td>16,619</td>
<td>47,391</td>
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<tr>
<td><strong>Total Liabilities</strong></td>
<td>$48,890</td>
<td>$16,707</td>
<td>$17,412</td>
<td>$48,185</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Deposits of Insurance Carriers</strong></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets:</strong></td>
<td>$256</td>
<td>6</td>
<td>—</td>
<td>$262</td>
</tr>
<tr>
<td>Cash and Cash Equivalents</td>
<td>444,501</td>
<td>149,190</td>
<td>143,435</td>
<td>450,356</td>
</tr>
<tr>
<td>Assets Held Pending Distribution</td>
<td>57</td>
<td>546</td>
<td>519</td>
<td>84</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td>$444,914</td>
<td>$149,742</td>
<td>$143,954</td>
<td>$450,702</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities:</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Liabilities</td>
<td>$444,914</td>
<td>$149,742</td>
<td>$143,954</td>
<td>$450,702</td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td>$444,914</td>
<td>$149,742</td>
<td>$143,954</td>
<td>$450,702</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Inmate and Ward</strong></th>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets:</strong></td>
<td>$21,501</td>
<td>1,124</td>
<td>62</td>
<td>$22,563</td>
</tr>
<tr>
<td>Cash and Cash Equivalents</td>
<td>507</td>
<td>14</td>
<td>11</td>
<td>510</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td>$22,008</td>
<td>$1,138</td>
<td>$73</td>
<td>$23,073</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities:</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts Payable</td>
<td>$3,312</td>
<td>2</td>
<td>7</td>
<td>$3,307</td>
</tr>
<tr>
<td>Due to Internal Parties (Governmental Funds and Business-type Activities)</td>
<td>163</td>
<td>82</td>
<td>—</td>
<td>245</td>
</tr>
<tr>
<td>Due to Claimants, Participants, Escrows and Providers</td>
<td>18,078</td>
<td>874</td>
<td>56</td>
<td>18,896</td>
</tr>
<tr>
<td>Other Liabilities</td>
<td>455</td>
<td>170</td>
<td>—</td>
<td>625</td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td>$22,008</td>
<td>$1,128</td>
<td>$63</td>
<td>$23,073</td>
</tr>
</tbody>
</table>
### Child Support Collection

<table>
<thead>
<tr>
<th></th>
<th>Balance July 1</th>
<th>Additions</th>
<th>Deletions</th>
<th>Balance June 30</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and Cash Equivalents</td>
<td>$18,038</td>
<td>$630,355</td>
<td>$633,952</td>
<td>$14,441</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$18,038</td>
<td>$630,355</td>
<td>$633,952</td>
<td>$14,441</td>
</tr>
<tr>
<td><strong>Liabilities:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Due to Claimants, Participants, Escrows and Providers</td>
<td>$18,038</td>
<td>$630,355</td>
<td>$633,952</td>
<td>$14,441</td>
</tr>
<tr>
<td>Total Liabilities</td>
<td>$18,038</td>
<td>$630,355</td>
<td>$633,952</td>
<td>$14,441</td>
</tr>
</tbody>
</table>

### Behavioral Health Patient

<table>
<thead>
<tr>
<th></th>
<th>Balance July 1</th>
<th>Additions</th>
<th>Deletions</th>
<th>Balance June 30</th>
</tr>
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<tbody>
<tr>
<td><strong>Assets:</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Cash and Cash Equivalents</td>
<td>$1,154</td>
<td>$2,022</td>
<td>$2,418</td>
<td>$758</td>
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<tr>
<td>Total Assets</td>
<td>$1,154</td>
<td>$2,022</td>
<td>$2,418</td>
<td>$758</td>
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<tr>
<td><strong>Liabilities:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Due to Claimants, Participants, Escrows and Providers</td>
<td>$1,154</td>
<td>$2,022</td>
<td>$2,418</td>
<td>$758</td>
</tr>
<tr>
<td>Total Liabilities</td>
<td>$1,154</td>
<td>$2,022</td>
<td>$2,418</td>
<td>$758</td>
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</table>

### Behavioral Health Non-Patient

<table>
<thead>
<tr>
<th></th>
<th>Balance July 1</th>
<th>Additions</th>
<th>Deletions</th>
<th>Balance June 30</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and Cash Equivalents</td>
<td>$46</td>
<td>$12</td>
<td>$15</td>
<td>$43</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$46</td>
<td>$12</td>
<td>$15</td>
<td>$43</td>
</tr>
<tr>
<td><strong>Liabilities:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Due to Claimants, Participants, Escrows and Providers</td>
<td>$46</td>
<td>$12</td>
<td>$15</td>
<td>$43</td>
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<tr>
<td>Total Liabilities</td>
<td>$46</td>
<td>$12</td>
<td>$15</td>
<td>$43</td>
</tr>
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</table>

### Comptroller's Debt Setoff

<table>
<thead>
<tr>
<th></th>
<th>Balance July 1</th>
<th>Additions</th>
<th>Deletions</th>
<th>Balance June 30</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and Cash Equivalents</td>
<td>$1,190</td>
<td>$12,484</td>
<td>$12,889</td>
<td>$785</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$1,190</td>
<td>$12,484</td>
<td>$12,889</td>
<td>$785</td>
</tr>
<tr>
<td><strong>Liabilities:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Liabilities</td>
<td>$1,190</td>
<td>$12,484</td>
<td>$12,889</td>
<td>$785</td>
</tr>
<tr>
<td>Total Liabilities</td>
<td>$1,190</td>
<td>$12,484</td>
<td>$12,889</td>
<td>$785</td>
</tr>
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### Legal Settlement

<table>
<thead>
<tr>
<th></th>
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<th>Additions</th>
<th>Deletions</th>
<th>Balance June 30</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and Cash Equivalents</td>
<td>$5,009</td>
<td>$2,519</td>
<td>$3,452</td>
<td>$4,076</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$5,009</td>
<td>$2,519</td>
<td>$3,452</td>
<td>$4,076</td>
</tr>
<tr>
<td><strong>Liabilities:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obligations Under Securities Lending Program</td>
<td>$141</td>
<td>$159</td>
<td>$141</td>
<td>$159</td>
</tr>
<tr>
<td>Other Liabilities</td>
<td>4,868</td>
<td>2,360</td>
<td>3,311</td>
<td>3,917</td>
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<tr>
<td>Total Liabilities</td>
<td>$5,009</td>
<td>$2,519</td>
<td>$3,452</td>
<td>$4,076</td>
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### Consumer Services

<table>
<thead>
<tr>
<th></th>
<th>Balance July 1</th>
<th>Additions</th>
<th>Deletions</th>
<th>Balance June 30</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and Cash Equivalents</td>
<td>$1,383</td>
<td>$96</td>
<td>$188</td>
<td>$1,291</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$1,383</td>
<td>$96</td>
<td>$188</td>
<td>$1,291</td>
</tr>
<tr>
<td><strong>Liabilities:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts Payable</td>
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<td>$56</td>
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<tr>
<td>Other Liabilities</td>
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<tr>
<td>Total Liabilities</td>
<td>$1,383</td>
<td>$96</td>
<td>$188</td>
<td>$1,291</td>
</tr>
</tbody>
</table>

*Continued on next page*
Combining Statement of Changes in Assets and Liabilities – Agency Funds (Continued from previous page)

For the Fiscal Year Ended June 30, 2019
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>State Asset Forfeiture</th>
<th>Balance July 1</th>
<th>Additions</th>
<th>Deletions</th>
<th>Balance June 30</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and Cash Equivalents</td>
<td>$2,254</td>
<td>$8,002</td>
<td>$7,026</td>
<td>$3,230</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$2,254</td>
<td>$8,002</td>
<td>$7,026</td>
<td>$3,230</td>
</tr>
<tr>
<td><strong>Liabilities:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obligations Under Securities Lending Program</td>
<td>$142</td>
<td>$241</td>
<td>$142</td>
<td>$241</td>
</tr>
<tr>
<td>Other Liabilities</td>
<td>$2,112</td>
<td>$7,761</td>
<td>$6,884</td>
<td>$2,989</td>
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<tr>
<td>Total Liabilities</td>
<td>$2,254</td>
<td>$8,002</td>
<td>$7,026</td>
<td>$3,230</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Virginia School for the Deaf and the Blind</th>
<th>Balance July 1</th>
<th>Additions</th>
<th>Deletions</th>
<th>Balance June 30</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and Cash Equivalents</td>
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<td>$6</td>
<td>$7</td>
<td>$18</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$19</td>
<td>$6</td>
<td>$7</td>
<td>$18</td>
</tr>
<tr>
<td><strong>Liabilities:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Due to Claimants, Participants, Escrows and Providers</td>
<td>$19</td>
<td>$6</td>
<td>$7</td>
<td>$18</td>
</tr>
<tr>
<td>Total Liabilities</td>
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<td>$6</td>
<td>$7</td>
<td>$18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wilson Workforce and Rehabilitation Center</th>
<th>Balance July 1</th>
<th>Additions</th>
<th>Deletions</th>
<th>Balance June 30</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and Cash Equivalents</td>
<td>$7</td>
<td>$7</td>
<td>$7</td>
<td>$7</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$7</td>
<td>$7</td>
<td>$7</td>
<td>$7</td>
</tr>
<tr>
<td><strong>Liabilities:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Due to Claimants, Participants, Escrows and Providers</td>
<td>$7</td>
<td>$7</td>
<td>$7</td>
<td>$7</td>
</tr>
<tr>
<td>Total Liabilities</td>
<td>$7</td>
<td>$7</td>
<td>$7</td>
<td>$7</td>
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</table>

<table>
<thead>
<tr>
<th>Third Party Administrator</th>
<th>Balance July 1</th>
<th>Additions</th>
<th>Deletions</th>
<th>Balance June 30</th>
</tr>
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<tbody>
<tr>
<td><strong>Assets:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and Cash Equivalents</td>
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<td>$5,621</td>
<td>$5,023</td>
<td>$14,102</td>
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<td>Accounts Receivable</td>
<td>62</td>
<td>80</td>
<td>62</td>
<td>80</td>
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<tr>
<td>Other Assets</td>
<td>23</td>
<td>12</td>
<td>—</td>
<td>35</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$13,589</td>
<td>$5,713</td>
<td>$5,085</td>
<td>$14,217</td>
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<tr>
<td><strong>Liabilities:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts Payable</td>
<td>$4</td>
<td>$301</td>
<td>$4</td>
<td>$301</td>
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<tr>
<td>Obligations Under Securities Lending Program</td>
<td>927</td>
<td>1,062</td>
<td>927</td>
<td>1,062</td>
</tr>
<tr>
<td>Due to Claimants, Participants, Escrows and Providers</td>
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<td>4,562</td>
<td>4,605</td>
<td>12,479</td>
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<td>Other Liabilities</td>
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<td>20</td>
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<tr>
<td>Insurance Premiums and Claims Payable</td>
<td>128</td>
<td>245</td>
<td>—</td>
<td>373</td>
</tr>
<tr>
<td>Total Liabilities</td>
<td>$13,589</td>
<td>$6,164</td>
<td>$5,556</td>
<td>$14,217</td>
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</table>
### Virginia Veterans’ Care Center Resident

<table>
<thead>
<tr>
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<th>Balance July 1</th>
<th>Additions</th>
<th>Deletions</th>
<th>Balance June 30</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and Cash Equivalents</td>
<td>$311</td>
<td>$187</td>
<td>$290</td>
<td>$208</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$311</td>
<td>$187</td>
<td>$290</td>
<td>$208</td>
</tr>
<tr>
<td><strong>Liabilities:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Due to Claimants, Participants, Escrows and Providers</td>
<td>$311</td>
<td>$187</td>
<td>$290</td>
<td>$208</td>
</tr>
<tr>
<td>Total Liabilities</td>
<td>$311</td>
<td>$187</td>
<td>$290</td>
<td>$208</td>
</tr>
</tbody>
</table>

### Virginia Individual Development Account Trust

|                     |                |           |           |                 |
| **Assets:**         |                |           |           |                 |
| Cash and Cash Equivalents | $ —           | $ 78     | $ 78     | $ —             |
| Total Assets        | $ —           | $ 78     | $ 78     | $ —             |
| **Liabilities:**    |                |           |           |                 |
| Due to Claimants, Participants, Escrows and Providers | $ —           | $ 78     | $ 78     | $ —             |
| Total Liabilities   | $ —           | $ 78     | $ 78     | $ —             |

### E-Payables

|                     |                |           |           |                 |
| **Assets:**         |                |           |           |                 |
| Cash and Cash Equivalents | $28,552       | $170,845 | $166,942 | $32,455         |
| Total Assets        | $28,552       | $170,845 | $166,942 | $32,455         |
| **Liabilities:**    |                |           |           |                 |
| Other Liabilities   | $28,552       | $170,845 | $166,942 | $32,455         |
| Total Liabilities   | $28,552       | $170,845 | $166,942 | $32,455         |

### Totals - Agency Funds

<table>
<thead>
<tr>
<th></th>
<th>Balance July 1</th>
<th>Additions</th>
<th>Deletions</th>
<th>Balance June 30</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and Cash Equivalents</td>
<td>$332,935</td>
<td>$2,572,190</td>
<td>$2,540,165</td>
<td>$364,960</td>
</tr>
<tr>
<td>Assets Held Pending Distribution</td>
<td>$457,387</td>
<td>$150,667</td>
<td>$148,610</td>
<td>$459,444</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>$63,156</td>
<td>$61,652</td>
<td>$63,122</td>
<td>$61,686</td>
</tr>
<tr>
<td>Due from Internal Parties (Governmental Funds and Business-type Activities)</td>
<td>$16,732</td>
<td>$16,732</td>
<td>$16,732</td>
<td>—</td>
</tr>
<tr>
<td>Other Assets</td>
<td>$23</td>
<td>$12</td>
<td>—</td>
<td>$35</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$870,233</td>
<td>$2,784,521</td>
<td>$2,768,629</td>
<td>$886,125</td>
</tr>
<tr>
<td><strong>Liabilities:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts Payable</td>
<td>$8,974</td>
<td>$242,436</td>
<td>$242,412</td>
<td>$8,998</td>
</tr>
<tr>
<td>Amounts Due to Other Governments</td>
<td>$277,245</td>
<td>$1,538,610</td>
<td>$1,532,526</td>
<td>$283,329</td>
</tr>
<tr>
<td>Due to Internal Parties (Governmental Funds and Business-type Activities)</td>
<td>$163</td>
<td>$3,853</td>
<td>—</td>
<td>$4,016</td>
</tr>
<tr>
<td>Obligations Under Securities Lending Program</td>
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<td>$2,403</td>
<td>$1,973</td>
<td>$2,403</td>
</tr>
<tr>
<td>Due to Claimants, Participants, Escrows and Providers</td>
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<td>$638,103</td>
<td>$641,428</td>
<td>$46,850</td>
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<tr>
<td>Other Liabilities</td>
<td>$531,575</td>
<td>$359,332</td>
<td>$350,751</td>
<td>$540,156</td>
</tr>
<tr>
<td>Insurance Premiums and Claims Payable</td>
<td>$128</td>
<td>$245</td>
<td>—</td>
<td>$373</td>
</tr>
<tr>
<td>Total Liabilities</td>
<td>$870,233</td>
<td>$2,784,982</td>
<td>$2,769,090</td>
<td>$886,125</td>
</tr>
</tbody>
</table>
Nonmajor Component Units

Component Units are organizations that are legally separate from the Commonwealth of Virginia. Each discrete component unit serves or benefits those outside of the primary government.

The Higher Education Institutions account for the resources received and used in the operation of the Commonwealth’s institutions of higher education and medical teaching hospitals.

Higher Education Institutions included in this section are:

- University of Virginia, including the University of Virginia Medical Center, and the University of Virginia College at Wise
- Virginia Polytechnic Institute and State University
- Virginia Commonwealth University, including the Virginia Commonwealth University Health System Authority
- The College of William & Mary, including Richard Bland College and the Virginia Institute of Marine Science
- Virginia Military Institute
- Virginia State University
- Norfolk State University
- University of Mary Washington
- James Madison University
- Radford University
- Old Dominion University
- George Mason University
- Virginia Community College System
- Christopher Newport University
- Longwood University
- Southwest Virginia Higher Education Center
- Roanoke Higher Education Authority
- Innovation and Entrepreneurship Investment Authority
- Institute for Advanced Learning and Research
- Southern Virginia Higher Education Center
- New College Institute
The Virginia Economic Development Partnership works to enhance and increase the Commonwealth’s commerce and trade, both domestically and internationally.

The Virginia Outdoors Foundation promotes preservation and fundraising for the purchase of preservation land.

The Virginia Port Authority is empowered to maintain and operate Virginia's harbors and ports.

The Virginia Tourism Authority promotes tourism and film production industries of the Commonwealth.

The Virginia Foundation for Healthy Youth determines the appropriate recipients of monies in the Virginia Tobacco Settlement Fund.

The Tobacco Region Revitalization Commission determines the appropriate recipients of monies in the Tobacco Indemnification and Community Revitalization Fund.

The Hampton Roads Sanitation District Commission operates a sewage system for 18 localities in the Chesapeake Bay Area.

The Virginia Biotechnology Research Partnership Authority assists in the development of a biotechnology research park.

The Virginia Small Business Financing Authority assists small businesses in the Commonwealth in obtaining financing for new businesses or the expansion of existing businesses.

The Virginia School for the Deaf and Blind Foundation operates exclusively for the benefit of the Virginia School for the Deaf and Blind.

The Science Museum of Virginia Foundation operates to implement and fund projects and operations of the Science Museum of Virginia.

The Virginia Commercial Space Flight Authority disseminates knowledge pertaining to scientific and technological research and development among public and private entities including, but not limited to, knowledge in the area of commercial space flight, and to promote industrial and economic development.

The Danville Science Center, Inc., promotes programs, projects and operations to educate students.

The Virginia Museum of Fine Arts Foundation implements and funds programs, projects, and operations of the Virginia Museum of Fine Arts.

The A. L. Philpott Manufacturing Extension Partnership promotes industrial expansion by providing consulting services to manufacturers.

The Fort Monroe Authority assists in formulating a reuse plan for Fort Monroe.

The Assistive Technology Loan Fund Authority provides assistance with loans and in the purchase of assistive technology or other equipment to enable Virginians with disabilities to become more independent.

The Virginia Land Conservation Foundation acquires interests in preservation land and provides grants to other entities to acquire interests in preservation land.

The Virginia Arts Foundation works to promote the arts in the Commonwealth.

The Library of Virginia Foundation promotes and supports the Library of Virginia.

The Virginia Health Workforce Development Authority provides assistance to the health professions.
## Combining Statement of Net Position – Nonmajor Component Units

**June 30, 2019**  
(Dollars in Thousands)

### Assets and Deferred Outflows of Resources

<table>
<thead>
<tr>
<th></th>
<th>University of Virginia</th>
<th>Virginia Polytechnic Institute and State University</th>
<th>Virginia Commonwealth University</th>
<th>The College of William and Mary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash and Cash Equivalents</strong></td>
<td>$235,522</td>
<td>$141,831</td>
<td>$501,835</td>
<td>$72,886</td>
</tr>
<tr>
<td><strong>Investments</strong></td>
<td>8,760,928</td>
<td>708,165</td>
<td>2,210,043</td>
<td>389,617</td>
</tr>
<tr>
<td><strong>Receivables, Net</strong></td>
<td>536,295</td>
<td>125,119</td>
<td>717,370</td>
<td>21,933</td>
</tr>
<tr>
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### Liabilities and Deferred Inflows of Resources

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<th></th>
<th>University of Virginia</th>
<th>Virginia Polytechnic Institute and State University</th>
<th>Virginia Commonwealth University</th>
<th>The College of William and Mary</th>
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### Net Position

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<th>Virginia Polytechnic Institute and State University</th>
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<th>The College of William and Mary</th>
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Continued on next page
### Combining Statement of Net Position – Nonmajor Component Units

*Continued from previous page*

June 30, 2019
(Dollars in Thousands)

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<tr>
<th>Assets and Deferred Outflows of Resources</th>
<th>Virginia Community College System</th>
<th>Christopher Newport University</th>
<th>Longwood University</th>
<th>Southwest Virginia Higher Education Center</th>
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<th>Liabilities and Deferred Inflows of Resources</th>
<th>Virginia Community College System</th>
<th>Christopher Newport University</th>
<th>Longwood University</th>
<th>Southwest Virginia Higher Education Center</th>
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<td>Due to External Parties (Fiduciary Funds)</td>
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<td>11</td>
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<td>345,098</td>
<td>511,939</td>
<td>3,016</td>
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<p>| Net Position                                |                                   |                                 |                     |                             |
| Net Investment in Capital Assets            | 1,316,479                          | 403,049                         | 212,257            | 10,660                      |
| Restricted For:                             |                                   |                                 |                     |                             |
| Nonexpendable:                               |                                   |                                 |                     |                             |
| Higher Education                            | 105,812                           | 29,081                          | 53,109             | —                           |
| Other                                       |                                   | —                               | —                   | —                           |
| Expendable:                                 |                                   |                                 |                     |                             |
| Capital Projects/Construction/Capital Acquisition | —                                 | —                               | —                   | —                           |
| Debt Service                                | —                                 | —                               | —                   | —                           |
| Gifts and Grants                            | —                                 | —                               | —                   | —                           |
| Higher Education                            | 132,122                           | 25,801                          | 27,320             | —                           |
| Net Other Postemployment Benefit - Virginia Sickness and Disability Program | 15,559                            | 1,284                           | 786                | 53                           |
| Other                                       | —                                 | —                               | —                   | —                           |
| Unrestricted                                | (391,060)                         | (46,258)                        | (60,245)           | (643)                       |
| Total Net Position (Deficit)                | $1,178,912                         | $412,957                        | $233,227           | $10,070                      |</p>
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<thead>
<tr>
<th>Roanoke Higher Education Authority</th>
<th>Innovation and Entrepreneurship Investment Authority</th>
<th>Institute for Advanced Learning and Research</th>
<th>Southern Virginia Higher Education Center</th>
<th>New College Institute</th>
<th>Virginia Economic Development Partnership</th>
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<td>20,806</td>
<td>15,061</td>
<td>33,634</td>
<td>3,641,078</td>
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| 168                               | 467                                               | 781                                         | 184                                      | 422                  | 1,335                                      | 455                        | 57,888                     |
| —                                 | —                                                 | —                                           | 23                                       | 9                    | 73                                         | —                          | 3                          |
| —                                 | —                                                 | —                                           | —                                        | —                    | —                                          | —                          | —                          |
| —                                 | —                                                 | —                                           | 20                                       | 5                    | 116                                        | 5                          | 4,329                      |
| 301                               | 184                                               | 1,145                                       | —                                        | 18                   | 81                                         | 4,500                      | —                          |
| —                                 | —                                                 | —                                           | —                                        | —                    | —                                          | —                          | 21,550                     |
| 13                                | 166                                               | 129                                         | —                                        | —                    | —                                          | —                          | —                          |
| —                                 | —                                                 | —                                           | —                                        | —                    | —                                          | —                          | —                          |

| 124                               | 30                                                | 61                                          | 194                                      | 49                   | 899                                        | 90                         | 19,024                     |
| 628                               | 156                                               | 20                                          | 3,750                                    | 1,253                | 15,147                                     | 455                        | 2,801,661                  |
| 1,234                             | 1,003                                             | 2,136                                       | 4,171                                    | 1,756                | 17,535                                     | 5,616                      | 2,904,460                  |
| 145                               | —                                                 | 51                                          | 508                                      | 247                  | 2,078                                      | 35                         | 4,162                      |
| 1,379                             | 1,003                                             | 2,187                                       | 4,679                                    | 2,003                | 19,613                                     | 5,651                      | 2,908,622                  |

| 31,047                            | 12,632                                            | 12,587                                      | 1,193                                    | 15,322               | 924                                        | 10,034                     | 374,200                    |
| —                                 | —                                                 | —                                           | —                                        | 1,350                | —                                          | —                          | —                          |
| —                                 | —                                                 | —                                           | —                                        | 42                   | —                                          | —                          | —                          |
| —                                 | —                                                 | —                                           | —                                        | —                    | —                                          | —                          | 132,383                    |
| —                                 | —                                                 | —                                           | —                                        | —                    | —                                          | —                          | —                          |
| —                                 | —                                                 | 991                                         | 73                                       | —                    | —                                          | —                          | —                          |
| —                                 | —                                                 | 95                                          | 34                                       | 390                  | —                                          | —                          | —                          |
| —                                 | —                                                 | —                                           | —                                        | —                    | —                                          | 1,260                      | —                          |
| 3,367                             | 12,497                                            | 9,505                                       | (2,517)                                  | 2,097                | (5,866)                                    | 16,647                     | 225,873                    |

$ 34,414                           $ 25,129                                           $ 23,083                                     $ (1,156)                 $ 18,803                                   $ (4,552)                   $ 27,983                    $ 732,456                   

Continued on next page
Combining Statement of Net Position – Nonmajor Component Units *(Continued from previous page)*

June 30, 2019
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Assets and Deferred Outflows of Resources</th>
<th>Virginia Tourism Authority</th>
<th>Virginia Foundation for Healthy Youth</th>
<th>Tobacco Region Revitalization Commission</th>
<th>Hampton Roads Sanitation District Commission</th>
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</thead>
<tbody>
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<td>Due from Primary Government</td>
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<td>Due from Component Units</td>
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<td>Inventory</td>
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<td>18,644</td>
<td>431,423</td>
<td>1,764,607</td>
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**Deferred Outflows of Resources**

| Total Assets and Deferred Outflows of Resources | 8,925                     | 18,885                               | 431,663                                  | 1,786,049                                   |

<table>
<thead>
<tr>
<th>Liabilities and Deferred Inflows of Resources</th>
<th>Virginia Tourism Authority</th>
<th>Virginia Foundation for Healthy Youth</th>
<th>Tobacco Region Revitalization Commission</th>
<th>Hampton Roads Sanitation District Commission</th>
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<td>Loans Payable to Primary Government</td>
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<td>Claims Payable:</td>
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<td>Due Within One Year</td>
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<tr>
<td>Due in More Than One Year</td>
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<tr>
<td>Long-term Liabilities:</td>
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<td>Due Within One Year</td>
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<td>29</td>
<td>90,839</td>
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<td>Due in More Than One Year</td>
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<td>1,560</td>
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<td><strong>Total Liabilities</strong></td>
<td>9,864</td>
<td>2,520</td>
<td>1,789</td>
<td>938,766</td>
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</tbody>
</table>

**Deferred Inflows of Resources**

| Total Liabilities and Deferred Inflows of Resources | 10,731                   | 5,241                                | 5,821                                    | 997,904                                     |

**Net Position**

| Net Investment in Capital Assets             | 1,498                     |                                      |                                          | 501,219                                      |

**Restricted For:**

| Nonexpendable:                               |                           |                                      |                                          |                                             |
| Higher Education                             |                           |                                      |                                          |                                             |
| Other                                        |                           |                                      |                                          |                                             |

| Expendable:                                  |                           |                                      |                                          |                                             |
| Capital Projects/Construction/Capital Acquisition |            |                                      |                                          |                                             |
| Debt Service                                 |                           |                                      |                                          |                                             |
| Gifts and Grants                             |                           |                                      |                                          |                                             |
| Higher Education                             |                           |                                      |                                          |                                             |
| Net Other Postemployment Benefit - Virginia Sickness and Disability Program | 218 | 54 | 40 | — |
| Other                                        |                           |                                      |                                          |                                             |

| Unrestricted                                 | (3,522)                   | 13,590                               | 231,697                                  | 258,373                                     |

**Total Net Position (Deficit)**

| $ (1,806)                               | $ 13,644                 | $ 425,842                             | $ 788,145                                |
|-----------------------------------------------------|------------------------------------------|-----------------------------------------------|----------------------------------------|-------------------------------------------|-----------------------------------|--------------------------------------------|-----------------------------------------------|
| $ 7,295                                             | $ 8,337                                  | $ 3,633                                       | $ 702                                  | $ 10,540                                   | $ 839                             | $ 2,953                                     | $ 1,535                                       |
| 10,427                                              | 1,552                                    | 859                                           | —                                      | 90                                         | 23,010                            | —                                          | —                                             |
| 13,410                                              | 7,056                                    | —                                             | 5                                      | 1,629                                      | 1,919                             | —                                          | 545                                          |
| —                                                   | —                                        | 736                                           | —                                      | 1                                          | 7,188                             | —                                          | —                                             |
| —                                                   | —                                        | —                                             | —                                      | —                                          | —                                 | —                                          | —                                             |
| —                                                   | —                                        | 1,730                                         | —                                      | —                                          | —                                 | —                                          | —                                             |
| —                                                   | —                                        | —                                             | 5                                      | —                                          | —                                 | —                                          | —                                             |
| 55                                                  | —                                        | 1                                             | 360                                    | 14                                         | —                                 | —                                          | —                                             |
| —                                                   | —                                        | —                                             | —                                      | —                                          | 4,438                             | —                                          | —                                             |
| —                                                   | 30,948                                   | 4,510                                         | —                                      | 145                                        | 6,887                             | —                                          | —                                             |
| —                                                   | —                                        | 16,104                                        | —                                      | 1,032                                      | 232,661                           | —                                          | —                                             |
| 355                                                 | 10,744                                   | —                                             | —                                      | —                                          | —                                 | —                                          | —                                             |
| 3,642                                               | —                                        | —                                             | 37,454                                 | —                                          | 819                               | —                                          | —                                             |
| 206                                                 | —                                        | 1                                             | 102,398                                | 1,315                                      | 999                               | —                                          | —                                             |
| 35,390                                              | 57,085                                   | 5,185                                         | 22,918                                 | 154,111                                    | 5,360                             | 278,955                                    | 2,089                                        |
| 705                                                 | 125                                      | —                                             | —                                      | —                                          | —                                 | —                                          | —                                             |
| 36,095                                              | 57,210                                   | 5,185                                         | 22,918                                 | 154,111                                    | 5,360                             | 278,955                                    | 2,089                                        |
| 101                                                 | 91                                       | —                                             | —                                      | 4,533                                      | 37                                | 270                                        | 567                                          |
| —                                                   | —                                        | —                                             | —                                      | —                                          | —                                 | —                                          | —                                             |
| —                                                   | —                                        | —                                             | —                                      | 865                                        | —                                 | —                                          | —                                             |
| —                                                   | —                                        | 4                                             | —                                      | —                                          | —                                 | —                                          | —                                             |
| 228                                                 | —                                        | 25                                            | 1,918                                  | 1,917                                      | —                                 | —                                          | —                                             |
| —                                                   | 1,246                                    | —                                             | —                                      | —                                          | —                                 | —                                          | —                                             |
| 11                                                  | 801                                      | —                                             | —                                      | —                                          | —                                 | —                                          | 11,602                                       |
| —                                                   | —                                        | —                                             | —                                      | —                                          | —                                 | —                                          | —                                             |
| —                                                   | —                                        | —                                             | —                                      | —                                          | —                                 | —                                          | —                                             |
| 4,241                                               | 2                                        | 2                                             | 52                                     | —                                          | 318                               | 229                                        | —                                             |
| 10,072                                              | 1,145                                    | —                                             | 6                                      | 70                                         | —                                 | 42,037                                     | —                                             |
| 14,653                                              | 3,289                                    | —                                             | 898                                    | 6,573                                      | 1,954                             | 54,227                                     | 796                                          |
| 22                                                  | 102                                      | —                                             | 898                                    | 6,573                                      | 1,954                             | 54,227                                     | 796                                          |
| 14,675                                              | 3,391                                    | —                                             | 898                                    | 6,573                                      | 1,954                             | 54,227                                     | 796                                          |
| 3,848                                               | —                                        | —                                             | 1                                      | 139,731                                    | 1,315                             | 516                                        | 9                                             |
| —                                                   | —                                        | —                                             | —                                      | —                                          | —                                 | —                                          | —                                             |
| —                                                   | —                                        | —                                             | —                                      | 5,807                                      | 254                               | 161,553                                    | —                                             |
| —                                                   | —                                        | —                                             | 3,297                                  | —                                          | —                                 | 72                                         | —                                             |
| —                                                   | —                                        | —                                             | —                                      | —                                          | —                                 | —                                          | —                                             |
| —                                                   | 38,298                                   | —                                             | 11,374                                 | —                                          | 923                               | 82,124                                     | —                                             |
| —                                                   | —                                        | 20                                            | —                                      | —                                          | —                                 | —                                          | —                                             |
| —                                                   | 493                                      | 6,550                                         | —                                      | 804                                        | —                                 | —                                          | —                                             |
| 17,079                                              | 8,951                                    | 5,185                                         | 1,541                                  | 7,003                                      | 914                               | (19,537)                                   | 1,284                                        |
| $ 21,420                                             | $ 53,819                                 | $ 5,185                                       | $ 22,020                                | $ 147,538                                  | $ 3,406                            | $ 224,728                                  | $ 1,293                                       |

Continued on next page
Combining Statement of Net Position – Nonmajor Component Units (Continued from previous page)

June 30, 2019
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Assets and Deferred Outflows of Resources</th>
<th>Fort Monroe Authority</th>
<th>Assistive Technology Loan Fund Authority</th>
<th>Virginia Land Conservation Foundation</th>
<th>Virginia Arts Foundation</th>
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<td>$ 90</td>
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<td>Depreciable Capital Assets, Net</td>
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<td>Total Assets</td>
<td>7,059</td>
<td>8,402</td>
<td>13,578</td>
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<tr>
<td>Deferred Outflows of Resources</td>
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<td>—</td>
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<td>Total Assets and Deferred Outflows of Resources</td>
<td>7,737</td>
<td>8,402</td>
<td>13,578</td>
<td>1,193</td>
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</table>

<table>
<thead>
<tr>
<th>Liabilities and Deferred Inflows of Resources</th>
<th>Fort Monroe Authority</th>
<th>Assistive Technology Loan Fund Authority</th>
<th>Virginia Land Conservation Foundation</th>
<th>Virginia Arts Foundation</th>
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<tbody>
<tr>
<td>Accounts Payable</td>
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<td>Amounts Due to Other Governments</td>
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<td>Due to Primary Government</td>
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<tr>
<td>Due to Component Units</td>
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<tr>
<td>Due to External Parties (Fiduciary Funds)</td>
<td>24</td>
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<td>Unearned Revenue</td>
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<td>Obligations Under Securities Lending Program</td>
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<td>Other Liabilities</td>
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<td>Loans Payable to Primary Government</td>
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<td>Claims Payable:</td>
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<tr>
<td>Due Within One Year</td>
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<tr>
<td>Due in More Than One Year</td>
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<td>Long-term Liabilities:</td>
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<td>Due in More Than One Year</td>
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<td>Deferred Inflows of Resources</td>
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<td>Total Liabilities and Deferred Inflows of Resources</td>
<td>4,827</td>
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<td>1,024</td>
<td>90</td>
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</tbody>
</table>

<p>| Net Position                                |                        |                                          | —                                   | —                        |
| Net Investment in Capital Assets             | 1,108                  | —                                        | —                                   | —                        |
| Restricted For:                             |                        |                                          | —                                   | —                        |
| Nonexpendable:                               |                        |                                          | —                                   | —                        |
| Higher Education                             | —                     | —                                        | —                                   | —                        |
| Other                                        | 728                   | —                                        | 1,103                               | —                        |
| Expendable:                                  |                        |                                          | —                                   | —                        |
| Capital Projects/Construction/Capital Acquisition | —                     | —                                        | —                                   | —                        |
| Debt Service                                 | —                     | —                                        | —                                   | —                        |
| Gifts and Grants                             | —                     | —                                        | —                                   | —                        |
| Higher Education                             | —                     | 56                                       | —                                   | —                        |
| Net Other Postemployment Benefit - Virginia Sickness and Disability Program | 66                   | —                                        | —                                   | —                        |
| Other                                        | —                     | —                                        | —                                   | —                        |
| Unrestricted                                 | 1,008                 | 8,336                                    | 12,554                              | —                        |
| Total Net Position (Deficit)                 | $ 2,910               | $ 8,392                                  | $ 12,554                            | $ 1,103                  |</p>
<table>
<thead>
<tr>
<th>Library of Virginia Foundation</th>
<th>Virginia Health Workforce Development Authority</th>
<th>Total Nonmajor Component Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 51</td>
<td>$ 97</td>
<td>$ 2,938,318</td>
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<tr>
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<td>8</td>
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<tr>
<td>1,330</td>
<td>97</td>
<td>5,160,484</td>
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<tr>
<td>$ 3,967</td>
<td>$ 97</td>
<td>$ 28,744,709</td>
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# Combining Statement of Activities – Nonmajor Component Units

## For the Fiscal Year Ended June 30, 2019

*(Dollars in Thousands)*

<table>
<thead>
<tr>
<th>Program Revenues</th>
<th>Expenses</th>
<th>Charges for Services</th>
<th>Operating Grants and Contributions</th>
<th>Capital Grants and Contributions</th>
<th>Net (Expenses) Revenue</th>
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</thead>
<tbody>
<tr>
<td><strong>Higher Education</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>University of Virginia</td>
<td>$4,245,517</td>
<td>$2,944,228</td>
<td>$869,095</td>
<td>$165,278</td>
<td>$(266,916)</td>
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<tr>
<td>Virginia Polytechnic Institute and State University</td>
<td>1,579,303</td>
<td>891,674</td>
<td>434,697</td>
<td>72,162</td>
<td>(180,770)</td>
</tr>
<tr>
<td>Virginia Commonwealth University</td>
<td>4,983,274</td>
<td>4,480,091</td>
<td>318,054</td>
<td>36,574</td>
<td>(149,455)</td>
</tr>
<tr>
<td>The College of William and Mary</td>
<td>492,153</td>
<td>281,759</td>
<td>103,784</td>
<td>40,271</td>
<td>(66,339)</td>
</tr>
<tr>
<td>Virginia Military Institute</td>
<td>105,119</td>
<td>54,415</td>
<td>34,605</td>
<td>8,749</td>
<td>(7,350)</td>
</tr>
<tr>
<td>Virginia State University</td>
<td>152,573</td>
<td>57,928</td>
<td>36,456</td>
<td>5,437</td>
<td>(52,752)</td>
</tr>
<tr>
<td>Norfolk State University</td>
<td>169,279</td>
<td>60,469</td>
<td>36,781</td>
<td>5,885</td>
<td>(66,144)</td>
</tr>
<tr>
<td>University of Mary Washington</td>
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<td>83,816</td>
<td>10,478</td>
<td>21,028</td>
<td>(21,567)</td>
</tr>
<tr>
<td>James Madison University</td>
<td>570,020</td>
<td>432,602</td>
<td>47,919</td>
<td>46,498</td>
<td>(43,001)</td>
</tr>
<tr>
<td>Radford University</td>
<td>215,318</td>
<td>119,720</td>
<td>26,265</td>
<td>17,699</td>
<td>(51,634)</td>
</tr>
<tr>
<td>Old Dominion University</td>
<td>547,339</td>
<td>280,608</td>
<td>112,796</td>
<td>12,227</td>
<td>(141,708)</td>
</tr>
<tr>
<td>George Mason University</td>
<td>1,014,407</td>
<td>628,853</td>
<td>277,140</td>
<td>40,786</td>
<td>(67,628)</td>
</tr>
<tr>
<td>Virginia Community College System</td>
<td>1,169,541</td>
<td>366,432</td>
<td>338,442</td>
<td>86,505</td>
<td>(378,162)</td>
</tr>
<tr>
<td>Christopher Newport University</td>
<td>168,501</td>
<td>120,317</td>
<td>10,524</td>
<td>12,914</td>
<td>(24,746)</td>
</tr>
<tr>
<td>Longwood University</td>
<td>147,194</td>
<td>88,872</td>
<td>8,807</td>
<td>15,358</td>
<td>(34,157)</td>
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<tr>
<td>Southwest Virginia Higher Education Center</td>
<td>7,619</td>
<td>1,657</td>
<td>3,823</td>
<td>252</td>
<td>(1,887)</td>
</tr>
<tr>
<td>Roanoke Higher Education Authority</td>
<td>5,347</td>
<td>1,409</td>
<td>80</td>
<td>1,614</td>
<td>(2,244)</td>
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<td>Innovation and Entrepreneurship Investment Authority</td>
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<td>3,181</td>
<td>139</td>
<td>—</td>
<td>(12,883)</td>
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<td>Institute for Advanced Learning and Research</td>
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<td>2,609</td>
<td>2,446</td>
<td>2,854</td>
<td>(2,151)</td>
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<tr>
<td>Southern Virginia Higher Education Center</td>
<td>6,046</td>
<td>749</td>
<td>581</td>
<td>298</td>
<td>(4,418)</td>
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<td>New College Institute</td>
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<td>827</td>
<td>(2)</td>
<td>—</td>
<td>(3,593)</td>
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<td>10,902,216</td>
<td>2,672,910</td>
<td>591,489</td>
<td>(1,579,505)</td>
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</table>

<table>
<thead>
<tr>
<th>Other Nonmajor Component Units</th>
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</thead>
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<td>Virginia Economic Development Partnership</td>
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<td>490</td>
<td>179</td>
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<td>Virginia Outdoors Foundation</td>
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<td>1,925</td>
<td>7,986</td>
<td>—</td>
<td>(12,758)</td>
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<td>Virginia Port Authority</td>
<td>634,462</td>
<td>562,422</td>
<td>15,781</td>
<td>97,656</td>
<td>41,397</td>
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<td>Virginia Tourism Authority</td>
<td>23,866</td>
<td>1,585</td>
<td>1,322</td>
<td>—</td>
<td>(20,959)</td>
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<td>Virginia Foundation for Healthy Youth</td>
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<td>—</td>
<td>68</td>
<td>—</td>
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<td>2,126</td>
<td>—</td>
<td>(30,979)</td>
</tr>
<tr>
<td>Hampton Roads Sanitation District Commission</td>
<td>235,786</td>
<td>309,783</td>
<td>—</td>
<td>2,818</td>
<td>76,815</td>
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<td>Virginia Biotechnology Research Partnership Authority</td>
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<td>Virginia Small Business Financing Authority</td>
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<td>1,732</td>
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<td>Virginia School for the Deaf and Blind Foundation</td>
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<td>(274)</td>
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<td>Science Museum of Virginia Foundation</td>
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<td>539</td>
<td>303</td>
<td>(3,585)</td>
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<td>Virginia Commercial Space Flight Authority</td>
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<td>3,660</td>
<td>8,607</td>
<td>9,250</td>
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<td>Danville Science Center, Inc.</td>
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<td>Virginia Museum of Fine Arts Foundation</td>
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<td>3,818</td>
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<td>A. L. Philpott Manufacturing Extension Partnership</td>
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<td>2,393</td>
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<td>Virginia Land Conservation Foundation</td>
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<td>181</td>
<td>73</td>
<td>—</td>
<td>(381)</td>
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<td>Virginia Health Workforce Development Authority</td>
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<td>—</td>
<td>890</td>
<td>—</td>
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<tr>
<td><strong>Total Other Nonmajor</strong></td>
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<td>46,088</td>
<td>110,941</td>
<td>(58,107)</td>
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<tr>
<td><strong>Total Nonmajor Component Units</strong></td>
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<td>$2,718,988</td>
<td>$702,430</td>
<td>$(1,637,612)</td>
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## General Revenues

<table>
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<tr>
<th>Operating Appropriations from Primary Government</th>
<th>Unrestricted Grants and Contributions</th>
<th>Investment Earnings</th>
<th>Miscellaneous</th>
<th>Contributions to Permanent and Term Endowments</th>
<th>Change in Net Position</th>
<th>Net Position (Deficit) July 1, as restated</th>
<th>Net Position (Deficit) June 30</th>
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<tbody>
<tr>
<td>$ 175,152</td>
<td>$ 28,896</td>
<td>$ 278,170</td>
<td>$ 73,139</td>
<td>$ 253,598</td>
<td>$ 542,039</td>
<td>$ 10,649,093</td>
<td>$ 11,191,132</td>
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<tr>
<td>266,321</td>
<td>9,689</td>
<td>28,494</td>
<td>24,023</td>
<td>70,589</td>
<td>218,346</td>
<td>2,557,124</td>
<td>2,775,470</td>
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<td>229,256</td>
<td>5,841</td>
<td>108,819</td>
<td>3,825</td>
<td>20,224</td>
<td>218,510</td>
<td>3,941,314</td>
<td>4,159,824</td>
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<td>80,754</td>
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<td>9,377</td>
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<td>108,562</td>
<td>1,569,708</td>
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<td>15,558</td>
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Commonwealth of Virginia 297
### Summary Schedule – Total Debt and Other Long-term Obligations of the Commonwealth

#### Last Five Fiscal Years

(Thousands of Dollars)

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<td><strong>Primary Government:</strong></td>
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<td>General Obligation Bonds (1):</td>
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<tr>
<td>Section 9(b) Bonds (2)</td>
<td>$401,873</td>
<td>$457,764</td>
<td>$515,468</td>
<td>$571,915</td>
<td>$642,181</td>
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<td>Section 9(c) Bonds (2)</td>
<td>14,628</td>
<td>18,764</td>
<td>22,743</td>
<td>29,717</td>
<td>33,190</td>
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<td><strong>Subtotal - General Obligation Bonds</strong></td>
<td>$416,501</td>
<td>$476,528</td>
<td>$538,211</td>
<td>$601,632</td>
<td>$675,371</td>
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<td>Nongeneral Obligation Debt:</td>
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<td>Section 9(d) Bonds (2)</td>
<td>5,830,241</td>
<td>5,538,920</td>
<td>5,252,795</td>
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<td>5,175,570</td>
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<td>6,068,634</td>
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<td>$11,859,640</td>
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<td>$11,217,623</td>
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<td>General Obligation Bonds (1):</td>
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<tr>
<td>Section 9(c) Bonds (2)</td>
<td>893,106</td>
<td>836,874</td>
<td>897,018</td>
<td>877,118</td>
<td>936,857</td>
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<tr>
<td><strong>Subtotal - General Obligation Bonds</strong></td>
<td>$893,106</td>
<td>$836,874</td>
<td>$897,018</td>
<td>$877,118</td>
<td>$936,857</td>
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<td><strong>Primary Government:</strong></td>
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<td>Section 9(d) Moral Obligation Bonds (2)</td>
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<td>18,716,043</td>
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<td><strong>Total Debt Not Supported by Taxes</strong></td>
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<td>$22,188,518</td>
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<td><strong>Total Debt of the Commonwealth</strong></td>
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<td>$47,084,114</td>
<td>$45,182,275</td>
<td>$42,811,531</td>
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(1) Total general obligation debt for the fiscal year ended.
(2) All amounts are net of unamortized discounts and premiums.
(3) Includes capital lease obligations, installment purchase obligations, pension liability, the long-term portion of the liability for compensated absences, and other debt supported by taxes.
(4) Includes bonds payable, notes payable, and other debt not supported by taxes.
(5) Foundations represent FASB reporting entities defined in Note 1.B.
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<td><strong>(Dollars in Thousands)</strong></td>
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<td>Public Facilities (2)</td>
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<td>$571,915</td>
<td>$642,181</td>
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<td>Subtotal Section 9(b) Debt</td>
<td>$401,873</td>
<td>$457,764</td>
<td>$515,468</td>
<td>$571,915</td>
<td>$642,181</td>
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<td>14,562</td>
<td>17,154</td>
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<td>Subtotal Section 9(c) Debt</td>
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<td>22,743</td>
<td>29,717</td>
<td>33,190</td>
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<tr>
<td><strong>Subtotal General Obligation Debt:</strong></td>
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<td>$601,632</td>
<td>$675,371</td>
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<td>Subtotal Section 9(d) Debt</td>
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<td>5,163,651</td>
<td>5,175,570</td>
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<td><strong>Subtotal Other Long-term Obligations:</strong></td>
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<tr>
<td><strong>Total Primary Government:</strong></td>
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<td>$12,124,841</td>
<td>$11,859,640</td>
<td>$11,494,849</td>
<td>$11,217,623</td>
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<tr>
<td><strong>Component Units:</strong></td>
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<td><strong>General Obligation Bonds (1) (3):</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher Educational Institutions (2)</td>
<td>893,106</td>
<td>836,874</td>
<td>897,018</td>
<td>877,118</td>
<td>936,857</td>
</tr>
<tr>
<td>Subtotal General Obligation Debt</td>
<td>893,106</td>
<td>836,874</td>
<td>897,018</td>
<td>877,118</td>
<td>936,857</td>
</tr>
<tr>
<td><strong>Nongeneral Obligation Debt:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia Port Authority (2)</td>
<td>234,114</td>
<td>243,448</td>
<td>253,208</td>
<td>275,256</td>
<td>288,446</td>
</tr>
<tr>
<td>Virginia College Building Authority (2)</td>
<td>4,566,772</td>
<td>4,305,134</td>
<td>3,858,925</td>
<td>4,049,060</td>
<td>3,520,214</td>
</tr>
<tr>
<td>Virginia Biotechnology Research Partnership Authority (2)</td>
<td>14,220</td>
<td>18,561</td>
<td>22,727</td>
<td>26,743</td>
<td>30,619</td>
</tr>
<tr>
<td>Subtotal Section 9(d) Debt</td>
<td>4,815,106</td>
<td>4,567,143</td>
<td>4,134,860</td>
<td>4,351,059</td>
<td>3,839,279</td>
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<td><strong>Other Long-term Debt:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Lease Obligations</td>
<td>7,510</td>
<td>5,878</td>
<td>76,889</td>
<td>71,403</td>
<td>77,456</td>
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<tr>
<td>Installment Purchase Obligations (4)</td>
<td>55,259</td>
<td>63,050</td>
<td>29,959</td>
<td>50,825</td>
<td>63,812</td>
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<td>Subtotal Other Long-term Debt</td>
<td>62,769</td>
<td>68,928</td>
<td>106,848</td>
<td>122,228</td>
<td>141,268</td>
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<td><strong>Subtotal Other Long-term Obligations:</strong></td>
<td>$4,903,769</td>
<td>$4,281,670</td>
<td>$4,402,424</td>
<td>$4,031,954</td>
<td>$3,615,006</td>
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<tr>
<td><strong>Total Component Units:</strong></td>
<td>$9,774,750</td>
<td>$9,754,615</td>
<td>$9,541,150</td>
<td>$9,382,359</td>
<td>$8,532,410</td>
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<tr>
<td><strong>Total Tax-Supported Debt:</strong></td>
<td>$21,716,313</td>
<td>$21,879,456</td>
<td>$21,400,790</td>
<td>$20,877,208</td>
<td>$19,750,033</td>
</tr>
</tbody>
</table>

(1) The general obligation debt is the only debt or long-term obligation that is backed by the full faith and credit of the Commonwealth.
(2) All amounts are net of unamortized discounts and premiums.
(3) See Note 1 on previous page.
(4) As discussed in Note 28, certain balances above contain Direct Borrowings and Direct Placements.
(5) GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, was effective starting with fiscal year 2018. This statement changed the OPEB Liability classifications.
### Debt and Other Long-term Obligations Not Supported by Taxes

**Last Five Fiscal Years**  
(Dollars in Thousands)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
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<tr>
<td><strong>Primary Government:</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Long-term Debt &amp; Obligations:</td>
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<td></td>
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<tr>
<td>Federal Reimbursement Anticipation Notes Payable (1)</td>
<td>1,151,850</td>
<td>1,153,617</td>
<td>992,214</td>
<td>663,147</td>
<td>705,574</td>
</tr>
<tr>
<td>Grant Anticipation Notes (GARVEES) (1)</td>
<td>580,311</td>
<td>582,425</td>
<td>151,486</td>
<td>140,522</td>
<td>125,294</td>
</tr>
<tr>
<td>Hampton Roads Transportation Accountability Commission (1)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Route 460 Funding Corporation of Virginia</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Net Pension Liability</td>
<td>128,005</td>
<td>135,632</td>
<td>151,486</td>
<td>140,522</td>
<td>125,294</td>
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<tr>
<td>OPEB Liability (6)</td>
<td>22,299</td>
<td>21,680</td>
<td>5,025</td>
<td>5,359</td>
<td>5,708</td>
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<td>Total OPEB Liability (6)</td>
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<td>25,434</td>
<td>—</td>
<td>—</td>
<td>—</td>
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<tr>
<td>Capital Lease Obligations</td>
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<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
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<td>Compensated Absences</td>
<td>11,070</td>
<td>10,546</td>
<td>10,096</td>
<td>10,003</td>
<td>10,123</td>
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<td>Installment Purchase Obligations</td>
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<td>518</td>
<td>—</td>
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<td>Tuition Benefits Payable</td>
<td>2,241,523</td>
<td>2,207,901</td>
<td>1,728,052</td>
<td>1,579,951</td>
<td>1,531,950</td>
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<tr>
<td>Lottery Prizes Payable</td>
<td>112,983</td>
<td>116,484</td>
<td>122,009</td>
<td>129,895</td>
<td>136,222</td>
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<tr>
<td><strong>Total Primary Government</strong></td>
<td>4,018,547</td>
<td>4,181,040</td>
<td>3,357,056</td>
<td>3,009,647</td>
<td>3,472,475</td>
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<tr>
<td><strong>Component Units:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Section 9(d) Moral Obligation Debt: (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia Resources Authority</td>
<td>926,540</td>
<td>927,834</td>
<td>928,088</td>
<td>907,209</td>
<td>877,875</td>
</tr>
<tr>
<td>Subtotal Section 9(d) Moral Obligation Debt</td>
<td>926,540</td>
<td>927,834</td>
<td>928,088</td>
<td>907,209</td>
<td>877,875</td>
</tr>
<tr>
<td>Section 9(d) Other Debt: (1):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher Educational Institutions (1):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching Hospitals Revenue Bonds (3) (5)</td>
<td>603,133</td>
<td>610,091</td>
<td>496,449</td>
<td>501,872</td>
<td>506,629</td>
</tr>
<tr>
<td>Subtotal Section 9(d) Other Debt</td>
<td>2,844,656</td>
<td>2,817,992</td>
<td>2,224,501</td>
<td>2,081,823</td>
<td>2,038,579</td>
</tr>
<tr>
<td><strong>Other Long-term Debt:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia Housing Development Authority (1) (5)</td>
<td>3,042,060</td>
<td>3,301,380</td>
<td>3,737,479</td>
<td>4,320,935</td>
<td>4,498,847</td>
</tr>
<tr>
<td>Hampton Roads Sanitation District Commission (1)</td>
<td>891,629</td>
<td>891,442</td>
<td>846,783</td>
<td>879,294</td>
<td>748,397</td>
</tr>
<tr>
<td>Virginia Public School Authority (1) (5)</td>
<td>3,554,603</td>
<td>3,641,402</td>
<td>3,580,954</td>
<td>3,655,914</td>
<td>3,551,741</td>
</tr>
<tr>
<td>Virginia Port Authority (1)</td>
<td>286,782</td>
<td>291,985</td>
<td>294,757</td>
<td>252,631</td>
<td>256,656</td>
</tr>
<tr>
<td>Virginia Resources Authority (1)</td>
<td>2,553,130</td>
<td>2,702,296</td>
<td>2,722,834</td>
<td>2,704,321</td>
<td>2,631,153</td>
</tr>
<tr>
<td>Notes Payable (5)</td>
<td>2,189,888</td>
<td>1,948,362</td>
<td>1,938,288</td>
<td>2,041,726</td>
<td>2,083,619</td>
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<tr>
<td>Net Pension Liability</td>
<td>35,844</td>
<td>38,427</td>
<td>57,787</td>
<td>44,339</td>
<td>41,516</td>
</tr>
<tr>
<td>OPEB Liability (6)</td>
<td>19,668</td>
<td>14,736</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total OPEB Liability (6)</td>
<td>59,243</td>
<td>101,081</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Capital Lease Obligations</td>
<td>2,305,489</td>
<td>2,289,887</td>
<td>2,194,493</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Other Long-term Debt</td>
<td>337,488</td>
<td>370,284</td>
<td>335,885</td>
<td>321,736</td>
<td>301,712</td>
</tr>
<tr>
<td>Foundations (4)</td>
<td>1,712,396</td>
<td>1,686,510</td>
<td>1,562,580</td>
<td>1,714,748</td>
<td>1,685,948</td>
</tr>
<tr>
<td>Subtotal Other Long-term Debt</td>
<td>16,987,220</td>
<td>17,277,792</td>
<td>17,271,840</td>
<td>15,935,644</td>
<td>15,799,589</td>
</tr>
<tr>
<td>Subtotal Section 9(d) and Other Debt</td>
<td>19,831,876</td>
<td>20,095,784</td>
<td>19,496,341</td>
<td>18,017,467</td>
<td>17,838,168</td>
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<tr>
<td><strong>Total Component Units</strong></td>
<td>20,758,416</td>
<td>21,023,618</td>
<td>19,966,418</td>
<td>18,017,467</td>
<td>18,716,043</td>
</tr>
<tr>
<td><strong>Total Debt Not Supported by Taxes (2)</strong></td>
<td>24,776,963</td>
<td>25,204,658</td>
<td>23,781,485</td>
<td>21,934,323</td>
<td>22,188,518</td>
</tr>
</tbody>
</table>

(1) All amounts are net of unamortized discounts and premiums.  
(2) These amounts are not backed by the full faith and credit of the Commonwealth.  
(3) Includes the Virginia Commonwealth University Health System Authority.  
(4) Foundations represent FASB reporting entities defined in Note 1.B.  
(5) As discussed in Note 28, certain balances above contain Direct Borrowings and Direct Placements.  
(6) GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, was effective starting with fiscal year 2018. This statement changed the OPEB Liability classifications.
## Authorized and Unissued Tax-Supported Debt

For the Fiscal Year Ended June 30, 2019  
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Section 9(c) Debt (Primary Government):</th>
<th>As of June 30, 2018</th>
<th>New Debt Authorized</th>
<th>Debt Issued</th>
<th>Other Adjustments</th>
<th>As of June 30, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher Educational Institution Bonds</td>
<td>$663,335</td>
<td>$17,500</td>
<td>$106,890</td>
<td>$(7,528)</td>
<td>$566,417</td>
</tr>
<tr>
<td>Parking Facilities Bonds</td>
<td>226</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>226</td>
</tr>
<tr>
<td>Subtotal Section 9(c) Debt</td>
<td>663,561</td>
<td>17,500</td>
<td>106,890</td>
<td>$(7,528)</td>
<td>566,643</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 9(d) Debt:</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Government:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation Contract Revenue Bonds</td>
<td>24,700</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>24,700</td>
</tr>
<tr>
<td>(Northern Virginia Transportation District Fund Program)</td>
<td>24,700</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>24,700</td>
</tr>
<tr>
<td>U.S. Route 58 Corridor Development Program</td>
<td>595,700</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>595,700</td>
</tr>
<tr>
<td>Transportation Capital Projects Revenue Bonds</td>
<td>498,235</td>
<td>—</td>
<td>235,965</td>
<td>$(19,036)</td>
<td>243,234</td>
</tr>
</tbody>
</table>

| Component Units:                       |                      |                     |             |                   |                     |
| Virginia Public Building Authority     | 1,835,095            | 466,986             | 336,950     | (47,158)          | 1,917,973           |
| (Projects)                             | 48,553               | —                   | 289         | (3)               | 48,261              |
| Virginia College Building Authority    | 1,747,797            | 621,517             | 439,300     | (44,793)          | 1,885,221           |
| (Jails)                                | 166,000              | —                   | 73,945      | (9,055)           | 83,000              |
| Subtotal Section 9(d) Debt             | 4,916,080            | 1,088,503           | 1,086,449   | (120,045)         | 4,798,089           |

| Total Authorized and Unissued          |                      |                     |             |                   |                     |
| Tax-Supported Debt                     | $5,579,641           | $1,106,003          | $1,193,339  | $(127,573)        | $5,364,732          |
## Tax-Supported Debt – Annual Debt Service Requirements [1]

For the Fiscal Year Ended June 30, 2019

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Fiscal Year Ending June 30</th>
<th>General Obligation Debt Sections 9(a), 9(b) and 9(c)</th>
<th>Other Tax-Supported Debt Section 9(d) [1] [2]</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Principal</td>
<td>Interest</td>
</tr>
<tr>
<td>2020</td>
<td>$107,870</td>
<td>$51,769</td>
</tr>
<tr>
<td>2021</td>
<td>110,360</td>
<td>46,804</td>
</tr>
<tr>
<td>2022</td>
<td>106,240</td>
<td>41,604</td>
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<tr>
<td>2023</td>
<td>107,065</td>
<td>36,679</td>
</tr>
<tr>
<td>2024</td>
<td>107,115</td>
<td>31,768</td>
</tr>
<tr>
<td>2025</td>
<td>99,355</td>
<td>26,858</td>
</tr>
<tr>
<td>2026</td>
<td>94,455</td>
<td>22,470</td>
</tr>
<tr>
<td>2027</td>
<td>86,615</td>
<td>18,289</td>
</tr>
<tr>
<td>2028</td>
<td>71,705</td>
<td>14,308</td>
</tr>
<tr>
<td>2029</td>
<td>57,540</td>
<td>11,319</td>
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<tr>
<td>2030</td>
<td>49,020</td>
<td>8,914</td>
</tr>
<tr>
<td>2031</td>
<td>45,065</td>
<td>6,925</td>
</tr>
<tr>
<td>2032</td>
<td>34,685</td>
<td>5,203</td>
</tr>
<tr>
<td>2033</td>
<td>34,565</td>
<td>3,995</td>
</tr>
<tr>
<td>2034</td>
<td>27,475</td>
<td>2,789</td>
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<tr>
<td>2035</td>
<td>20,650</td>
<td>1,789</td>
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<tr>
<td>2036</td>
<td>13,295</td>
<td>1,034</td>
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<tr>
<td>2037</td>
<td>5,625</td>
<td>570</td>
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<tr>
<td>2038</td>
<td>5,520</td>
<td>369</td>
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<tr>
<td>2039</td>
<td>1,730</td>
<td>165</td>
</tr>
<tr>
<td>2040</td>
<td>1,785</td>
<td>84</td>
</tr>
<tr>
<td>2041</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>2042</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>2043</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

Subtotal                   | 1,187,735 | 333,705  | 1,521,440 | 9,659,348 | 3,625,273 | 13,284,621 |

Add Accretion on Capital Appreciation

Bonds — — — 29,503 — 29,503

Add Unamortized Premium 121,872 — 121,872 979,938 — 979,938

Less Unamortized Discount — — — (76) — (76)

Total $1,309,607 $333,705 $1,643,312 $10,668,713 $3,625,273 $14,293,986

[1] Includes Fairfax County Economic Development Authority. Does not include other capital leases, installment purchase obligations, regional jail reimbursements under the original treasury board program, compensated absences, pension liability, OPEB liability, pollution remediation liability and other liabilities.

[2] Includes principal amount of $5,853,607 (dollars in thousands) for the primary government, net of accretion on capital appreciation and unamortized premiums and discounts.
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<thead>
<tr>
<th></th>
<th>Principal</th>
<th>Interest</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>$</td>
<td>717,114</td>
<td>$ 462,189</td>
<td>$ 1,179,303</td>
</tr>
<tr>
<td>$</td>
<td>733,441</td>
<td>438,086</td>
<td>1,171,527</td>
</tr>
<tr>
<td></td>
<td>709,800</td>
<td>404,062</td>
<td>1,113,862</td>
</tr>
<tr>
<td></td>
<td>706,660</td>
<td>371,177</td>
<td>1,077,837</td>
</tr>
<tr>
<td></td>
<td>711,646</td>
<td>338,686</td>
<td>1,050,332</td>
</tr>
<tr>
<td>$</td>
<td>686,794</td>
<td>305,849</td>
<td>992,643</td>
</tr>
<tr>
<td></td>
<td>675,054</td>
<td>274,641</td>
<td>949,695</td>
</tr>
<tr>
<td>$</td>
<td>644,641</td>
<td>244,856</td>
<td>889,497</td>
</tr>
<tr>
<td></td>
<td>624,460</td>
<td>215,787</td>
<td>840,247</td>
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<tr>
<td></td>
<td>612,470</td>
<td>187,016</td>
<td>799,486</td>
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<td>593,070</td>
<td>159,104</td>
<td>752,174</td>
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<tr>
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<td>545,390</td>
<td>131,846</td>
<td>677,236</td>
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<tr>
<td></td>
<td>514,010</td>
<td>108,550</td>
<td>622,560</td>
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<td></td>
<td>464,350</td>
<td>88,432</td>
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<td>518,506</td>
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<td>402,295</td>
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<td>454,474</td>
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<td>320,475</td>
<td>37,214</td>
<td>357,689</td>
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<tr>
<td>$</td>
<td>244,795</td>
<td>25,685</td>
<td>270,480</td>
</tr>
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<td></td>
<td>141,080</td>
<td>17,140</td>
<td>158,220</td>
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<td>154,226</td>
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<td>84,620</td>
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<td>91,858</td>
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<td>62,015</td>
<td>4,369</td>
<td>66,384</td>
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<td>38,604</td>
<td>2,180</td>
<td>40,784</td>
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<td></td>
<td>23,474</td>
<td>785</td>
<td>24,259</td>
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<td>$</td>
<td>10,847,083</td>
<td>3,958,978</td>
<td>14,806,061</td>
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</table>

29,503 — 29,503

1,101,810 — 1,101,810

(76) — (76)

$ 11,978,320 $ 3,958,978 $ 15,937,298
Tax-Supported Debt – Detail of Long-term Indebtedness (1)
For the Fiscal Year Ended June 30, 2019
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Series</th>
<th>Amount Issued</th>
<th>Outstanding June 30, 2018</th>
<th>Issued (Retired) During Year</th>
<th>Outstanding June 30, 2019</th>
<th>Maturity</th>
</tr>
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<tbody>
<tr>
<td>General Obligation Debt</td>
<td></td>
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</tr>
<tr>
<td><strong>Section 9(b) Debt (Primary Government):</strong></td>
<td></td>
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<tr>
<td><strong>Public Facilities Bonds:</strong></td>
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<td>Series 2009</td>
<td>$80,000</td>
<td>$3,870</td>
<td>$(3,870)</td>
<td>$—</td>
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<tr>
<td>Series 2009 Refunding</td>
<td>121,765</td>
<td>79,295</td>
<td>$(19,860)</td>
<td>59,435</td>
<td>06/01/20-22</td>
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<tr>
<td>Series 2009 Taxable BABs</td>
<td>45,000</td>
<td>26,080</td>
<td>$(2,365)</td>
<td>23,715</td>
<td>06/01/20-29</td>
</tr>
<tr>
<td>Series 2012A Refunding</td>
<td>71,065</td>
<td>39,635</td>
<td>$(2,365)</td>
<td>37,270</td>
<td>06/01/20-24</td>
</tr>
<tr>
<td>Series 2013 Refunding</td>
<td>128,250</td>
<td>99,215</td>
<td>$(10,430)</td>
<td>90,015</td>
<td>06/01/20-28</td>
</tr>
<tr>
<td>Series 2015 Refunding</td>
<td>128,250</td>
<td>116,070</td>
<td>$(10,430)</td>
<td>105,640</td>
<td>06/01/20-27</td>
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<tr>
<td>Series 2015A Refunding</td>
<td>128,250</td>
<td>116,070</td>
<td>$(10,430)</td>
<td>105,640</td>
<td>06/01/20-29</td>
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<td>Series 2016B Refunding</td>
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<td>39,695</td>
<td>—</td>
<td>39,695</td>
<td>06/01/20-29</td>
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<td>Unamortized Premium</td>
<td>—</td>
<td>53,904</td>
<td>$(7,801)</td>
<td>46,103</td>
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<td><strong>Total Public Facilities Bonds:</strong></td>
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<td>457,764</td>
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<td><strong>Higher Educational Institution bonds (Component Units):</strong></td>
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<td>Series 2009 Bonds</td>
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<tr>
<td>Christopher Newport University</td>
<td></td>
<td></td>
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<tr>
<td>Residence Hall '01 Refunded Portion</td>
<td>1,878</td>
<td>1,828</td>
<td>$(14)</td>
<td>1,814</td>
<td>06/01/20-21</td>
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<td>The College of William and Mary</td>
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<td>Dining Commons Hall Renovation '05 Refunded Portion</td>
<td>3,200</td>
<td>2,235</td>
<td>$(520)</td>
<td>1,715</td>
<td>06/01/20-22</td>
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<tr>
<td>Dormitory Renovations '06B Refunded Portion</td>
<td>1,270</td>
<td>1,040</td>
<td>$(240)</td>
<td>800</td>
<td>06/01/20-22</td>
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<tr>
<td>Dormitory Renovations '02 Refunded Portion</td>
<td>2,582</td>
<td>1,368</td>
<td>$(323)</td>
<td>1,045</td>
<td>06/01/20-22</td>
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<td>Dormitory Renovations '05 Refunded Portion</td>
<td>1,940</td>
<td>1,355</td>
<td>$(315)</td>
<td>1,040</td>
<td>06/01/20-22</td>
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<td>Dormitory Renovations '01 Refunded Portion</td>
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<td>374</td>
<td>$(3)</td>
<td>371</td>
<td>06/01/20-21</td>
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<td>George Mason University</td>
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<tr>
<td>Housing Building V '01 Refunded Portion</td>
<td>6,267</td>
<td>6,126</td>
<td>$(38)</td>
<td>6,088</td>
<td>06/01/20-24</td>
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<tr>
<td>Housing Building V '02 Refunded Portion</td>
<td>4,448</td>
<td>2,348</td>
<td>$(553)</td>
<td>1,795</td>
<td>06/01/20-22</td>
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<tr>
<td>Housing VIII</td>
<td>7,910</td>
<td>275</td>
<td>$(275)</td>
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<td>—</td>
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<tr>
<td>Renovate President Park Phase I</td>
<td>1,790</td>
<td>240</td>
<td>$(240)</td>
<td>—</td>
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<tr>
<td>Student Housing Construction VII '05 Refunded</td>
<td>6,630</td>
<td>4,630</td>
<td>$(1,075)</td>
<td>3,555</td>
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<tr>
<td>Student Housing VII C</td>
<td>8,255</td>
<td>275</td>
<td>$(275)</td>
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<td>Student Housing Construction VII '06B Refunded</td>
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<td>6,740</td>
<td>$(1,565)</td>
<td>5,175</td>
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<tr>
<td>Bluestone Dorm Phase II '01 Refunded Portion</td>
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<td>445</td>
<td>$(3)</td>
<td>442</td>
<td>06/01/20-21</td>
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<tr>
<td>Renovate Bluestone Res Hall III '06B Refunded Portion</td>
<td>1,750</td>
<td>1,135</td>
<td>$(265)</td>
<td>870</td>
<td>06/01/20-22</td>
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<tr>
<td>Renovate Bluestone Dorms '02 Refunded Portion</td>
<td>1,048</td>
<td>573</td>
<td>$(131)</td>
<td>422</td>
<td>06/01/20-22</td>
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<tr>
<td>Renovate Bluestone Dorms II '02 Refunded Portion</td>
<td>1,089</td>
<td>573</td>
<td>$(136)</td>
<td>422</td>
<td>06/01/20-22</td>
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<td>Longwood University</td>
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<td>Housing Facilities Renovations '05 Refunded Portion</td>
<td>1,340</td>
<td>940</td>
<td>$(220)</td>
<td>720</td>
<td>06/01/20-22</td>
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<tr>
<td>Renovate Housing Facilities '06B Refunded Portion</td>
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<td>1,355</td>
<td>$(315)</td>
<td>1,040</td>
<td>06/01/20-22</td>
</tr>
<tr>
<td>Old Dominion University</td>
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<tr>
<td>Construct Residence Hall Ph II '06B Refunded Portion</td>
<td>2,465</td>
<td>2,020</td>
<td>$(470)</td>
<td>1,550</td>
<td>06/01/20-22</td>
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<tr>
<td>Housing Renovations '02 Refunded Portion</td>
<td>1,319</td>
<td>699</td>
<td>$(166)</td>
<td>533</td>
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<tr>
<td>Housing Renovations Ph I '05 Refunded Portion</td>
<td>1,625</td>
<td>1,135</td>
<td>$(265)</td>
<td>870</td>
<td>06/01/20-22</td>
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<td>University of Mary Washington</td>
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<tr>
<td>Residence Hall Renovation '01 Refunded Portion</td>
<td>153</td>
<td>148</td>
<td>$(1)</td>
<td>147</td>
<td>06/01/20-21</td>
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<td>Seacobeck Dining Hall '05 Refunded Portion</td>
<td>1,625</td>
<td>1,135</td>
<td>$(265)</td>
<td>870</td>
<td>06/01/20-22</td>
</tr>
<tr>
<td>University of Virginia</td>
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<td></td>
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<tr>
<td>Residence Hall Monroe Lane '01 Refunded Portion</td>
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<td>358</td>
<td>$(2)</td>
<td>356</td>
<td>06/01/20-21</td>
</tr>
<tr>
<td>Virginia Military Institute</td>
<td></td>
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<td></td>
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<tr>
<td>Crozet Hall &amp; Parking '04A Refunded Portion</td>
<td>4,242</td>
<td>2,755</td>
<td>$(640)</td>
<td>2,115</td>
<td>06/01/20-22</td>
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<td>Virginia Polytechnic Institute and State University</td>
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<tr>
<td>Parking Aux Projects '06B Refunded Portion</td>
<td>190</td>
<td>155</td>
<td>$(35)</td>
<td>120</td>
<td>06/01/20-22</td>
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<td>Improve Residence and Dining Halls</td>
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<td>$(835)</td>
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<td>Renovate Dietrick Servery Ph II '04A Refunded Portion</td>
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<td>1,230</td>
<td>$(285)</td>
<td>945</td>
<td>06/01/20-22</td>
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<tr>
<td>Renovate Ambler Johnston Hall</td>
<td>39,005</td>
<td>1,950</td>
<td>$(1,950)</td>
<td>—</td>
<td>—</td>
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<tr>
<td>Virginia State University</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Construct Residence Hall '06B Refunded Portion</td>
<td>4,965</td>
<td>4,065</td>
<td>$(845)</td>
<td>3,120</td>
<td>06/01/20-22</td>
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<tr>
<td>Construct Dining Hall '06B Refunded Portion</td>
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<td>1,050</td>
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<td>805</td>
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<tr>
<td><strong>Subtotal Series 2009 Bonds</strong></td>
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<tr>
<td>Series</td>
<td>Amount issued</td>
<td>Outstanding June 30, 2018</td>
<td>Issued (Retired) During Year</td>
<td>Outstanding June 30, 2019</td>
<td>Maturity</td>
</tr>
<tr>
<td>--------</td>
<td>---------------</td>
<td>--------------------------</td>
<td>-------------------------------</td>
<td>--------------------------</td>
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</tr>
<tr>
<td>General Obligation Debt (continued)</td>
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<tr>
<td>Section 9(c) Debt (continued)</td>
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<tr>
<td>Higher Educational Institution bonds (Component Units) (continued)</td>
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<tr>
<td><strong>Series 2010 Bonds</strong></td>
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<tr>
<td>Christopher Newport University</td>
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</tr>
<tr>
<td>Construct Residence Hall</td>
<td>34,480</td>
<td>29,035</td>
<td>(990)</td>
<td>28,045</td>
<td>06/01/20-40</td>
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<td>The College of William and Mary</td>
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<tr>
<td>Construct New Dormitory</td>
<td>2,010</td>
<td>1,345</td>
<td>(95)</td>
<td>1,250</td>
<td>06/01/20-30</td>
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<tr>
<td>Renovate Residence Halls</td>
<td>4,440</td>
<td>2,960</td>
<td>(215)</td>
<td>2,745</td>
<td>06/01/20-30</td>
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<td>George Mason University</td>
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<tr>
<td>Housing VIII</td>
<td>39,420</td>
<td>31,200</td>
<td>(1,490)</td>
<td>29,710</td>
<td>06/01/20-35</td>
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<td>1,325</td>
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<td>(70)</td>
<td>875</td>
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<td>Renovate Student Housing, President's Park II</td>
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<td>670</td>
<td>(335)</td>
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<td>4,080</td>
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<td>Renovate Bluestone Dormitories, Phase IV</td>
<td>14,890</td>
<td>9,945</td>
<td>(730)</td>
<td>9,215</td>
<td>06/01/20-30</td>
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<td>Renovate Student Housing, Phase I</td>
<td>1,975</td>
<td>1,315</td>
<td>(95)</td>
<td>1,220</td>
<td>06/01/20-30</td>
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<tr>
<td>Construct West Grace Housing and Parking Phase I</td>
<td>29,130</td>
<td>23,040</td>
<td>(1,105)</td>
<td>21,935</td>
<td>06/01/20-35</td>
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<tr>
<td>Construct Academic and Student Affairs Building</td>
<td>34,650</td>
<td>23,670</td>
<td>(1,735)</td>
<td>21,935</td>
<td>06/01/20-30</td>
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<tr>
<td>Parking Auxiliary Projects</td>
<td>745</td>
<td>495</td>
<td>(35)</td>
<td>460</td>
<td>06/01/20-30</td>
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<tr>
<td><strong>Subtotal Series 2010 Bonds</strong></td>
<td>171,270</td>
<td>128,905</td>
<td>(7,100)</td>
<td>121,805</td>
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<td><strong>Series 2011 Bonds</strong></td>
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<tr>
<td>Christopher Newport University</td>
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<tr>
<td>Renovate Santoro Residence Hall</td>
<td>4,100</td>
<td>1,445</td>
<td>(465)</td>
<td>980</td>
<td>06/01/20-21</td>
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<tr>
<td>The College of William and Mary</td>
<td></td>
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</tr>
<tr>
<td>Construct New Dormitory</td>
<td>14,400</td>
<td>10,885</td>
<td>(645)</td>
<td>10,240</td>
<td>06/01/20-31</td>
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<td>George Mason University</td>
<td></td>
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</tr>
<tr>
<td>Housing VIII</td>
<td>20,230</td>
<td>16,830</td>
<td>(820)</td>
<td>16,210</td>
<td>06/01/20-36</td>
</tr>
<tr>
<td>Presidential Park Housing Renovation</td>
<td>2,700</td>
<td>1,000</td>
<td>(325)</td>
<td>675</td>
<td>06/01/20-21</td>
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<tr>
<td>Renovate Commons</td>
<td>14,350</td>
<td>11,275</td>
<td>(620)</td>
<td>10,605</td>
<td>06/01/20-31</td>
</tr>
<tr>
<td>Smithsonian CRC Housing</td>
<td>4,070</td>
<td>3,470</td>
<td>(130)</td>
<td>3,340</td>
<td>06/01/20-36</td>
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<tr>
<td>Student Housing VII-C</td>
<td>1,045</td>
<td>890</td>
<td>(30)</td>
<td>860</td>
<td>06/01/20-36</td>
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<tr>
<td>West Grace Housing - North</td>
<td>25,830</td>
<td>22,050</td>
<td>(810)</td>
<td>21,240</td>
<td>06/01/20-36</td>
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<tr>
<td>Virginia Polytechnic Institute and State University</td>
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<tr>
<td>Renovate Ambler Johnston Hall</td>
<td>18,860</td>
<td>14,245</td>
<td>(850)</td>
<td>13,395</td>
<td>06/01/20-31</td>
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<tr>
<td>Virginia State University</td>
<td></td>
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<tr>
<td>Construct Gateway Residence Hall Phase II</td>
<td>34,735</td>
<td>25,665</td>
<td>(1,530)</td>
<td>24,135</td>
<td>06/01/20-31</td>
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<tr>
<td>Construct Quad Phase II</td>
<td>28,555</td>
<td>22,450</td>
<td>(1,330)</td>
<td>21,120</td>
<td>06/01/20-31</td>
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<tr>
<td><strong>Subtotal Series 2011 Bonds</strong></td>
<td>168,875</td>
<td>130,205</td>
<td>(7,405)</td>
<td>122,800</td>
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<td><strong>Series 2012 Bonds</strong></td>
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<td></td>
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<tr>
<td>The College of William and Mary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dining Commons Hall Renovation 2005 Refunding</td>
<td>1,289</td>
<td>1,289</td>
<td>—</td>
<td>1,289</td>
<td>06/01/23-24</td>
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<td>Dorm Renovation - 2005 Refunding</td>
<td>780</td>
<td>779</td>
<td>—</td>
<td>779</td>
<td>06/01/23-24</td>
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<td>George Mason University</td>
<td></td>
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<td>Student Housing Construction, VII - 2005 Refunding</td>
<td>2,674</td>
<td>2,674</td>
<td>—</td>
<td>2,674</td>
<td>06/01/23-24</td>
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<tr>
<td>Longwood University</td>
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<td>Housing Facilities Renovation - 2005 Refunding</td>
<td>545</td>
<td>545</td>
<td>—</td>
<td>545</td>
<td>06/01/23-24</td>
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<tr>
<td>Old Dominion University</td>
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<td></td>
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</tr>
<tr>
<td>Housing Renovation, Phase I - 2005 Refunding</td>
<td>655</td>
<td>655</td>
<td>—</td>
<td>655</td>
<td>06/01/23-24</td>
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<tr>
<td>University of Mary Washington</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seabecbeck Dining Hall - 2005 Refunding</td>
<td>655</td>
<td>655</td>
<td>—</td>
<td>655</td>
<td>06/01/23-24</td>
</tr>
</tbody>
</table>

Continued on next page
### General Obligation Debt (continued)

### Section 3(c) Debt (continued)

### Higher Educational Institution bonds (Component Units)

#### Series 2012 Bonds (continued)

<table>
<thead>
<tr>
<th>University</th>
<th>Description</th>
<th>Amount issued</th>
<th>Outstanding June 30, 2018</th>
<th>Issued (Retired) During Year</th>
<th>Outstanding June 30, 2019</th>
<th>Maturity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virginia Military Institute</td>
<td>Crozet Hall &amp; Parking - 2004A Refunding</td>
<td>3,019</td>
<td>2,489</td>
<td></td>
<td>2,489</td>
<td>06/01/23-25</td>
</tr>
<tr>
<td>Virginia Polytechnic Institute and State University</td>
<td>Renovate Dietrick Servery - 2004A Refunding</td>
<td>942</td>
<td>705</td>
<td></td>
<td>705</td>
<td>06/01/23-24</td>
</tr>
</tbody>
</table>

**Subtotal Series 2012 Bonds**

| Total | 10,559 | 9,791 | —                      | 9,791                      |                         | 06/01/23-24 |

#### Series 2013 Bonds

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount issued</th>
<th>Outstanding June 30, 2018</th>
<th>Issued (Retired) During Year</th>
<th>Outstanding June 30, 2019</th>
<th>Maturity</th>
</tr>
</thead>
<tbody>
<tr>
<td>The College of William and Mary</td>
<td>Construct New Dormitory</td>
<td>8,770</td>
<td>7,186 (365)</td>
<td>6,820</td>
<td>06/01/20-33</td>
</tr>
<tr>
<td>Dining Commons Hall Renovation - 2005A Ref Portion</td>
<td>1,831</td>
<td>1,389</td>
<td>—</td>
<td>1,389</td>
<td>06/01/25-26</td>
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<tr>
<td>Dorm Renovations - 2005A Ref Portion</td>
<td>1,113</td>
<td>844</td>
<td>—</td>
<td>844</td>
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<tr>
<td>Dorm Renovations - 2006B Ref Portion</td>
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<td>1,201</td>
<td>—</td>
<td>1,201</td>
<td>06/01/23-26</td>
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<tr>
<td>Renovate Dormitory</td>
<td>4,660</td>
<td>3,820 (195)</td>
<td>3,625</td>
<td>06/01/20-33</td>
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<tr>
<td>George Mason University</td>
<td>Construct Student Housing VII &amp; Entrance Rd - 2007B Ref Portion</td>
<td>4,579</td>
<td>4,579 (567)</td>
<td>4,012</td>
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<tr>
<td>Construct Student Housing VII - 2007B Refunded Portion</td>
<td>584</td>
<td>584</td>
<td>(72)</td>
<td>512</td>
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<tr>
<td>Construct Student Housing VII - 2006B Refunded Portion</td>
<td>9,187</td>
<td>7,822</td>
<td>—</td>
<td>7,822</td>
<td>06/01/23-26</td>
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<tr>
<td>Student Housing Construction, VII - 2005A Ref Portion</td>
<td>10,504</td>
<td>9,533</td>
<td>—</td>
<td>9,533</td>
<td>06/01/25-30</td>
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<tr>
<td>James Madison University</td>
<td>Construct Dining Hall - 2007B Refunded Portion</td>
<td>8,207</td>
<td>8,207 (1,019)</td>
<td>7,188</td>
<td>06/01/20-25</td>
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<tr>
<td>Renovate Bluestone Residence Hall, Ph 3 - 2007B Ref Portion</td>
<td>893</td>
<td>893</td>
<td>(109)</td>
<td>784</td>
<td>06/01/20-25</td>
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<tr>
<td>Renovate Residence Hall - 2006B Refunded Portion</td>
<td>1,953</td>
<td>1,665</td>
<td>—</td>
<td>1,665</td>
<td>06/01/23-26</td>
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<tr>
<td>Longwood University</td>
<td>Housing Facility Renovation - 2005A Refunded Portion</td>
<td>472</td>
<td>286</td>
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<tr>
<td>Renovate Cox Hall - 2007B Refunded Portion</td>
<td>2,461</td>
<td>2,461 (305)</td>
<td>2,156</td>
<td>06/01/20-25</td>
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<tr>
<td>Renovate Housing Facilities - 2006B Refunded Portion</td>
<td>1,852</td>
<td>1,578</td>
<td>—</td>
<td>1,578</td>
<td>06/01/23-26</td>
</tr>
<tr>
<td>Old Dominion University</td>
<td>Construct Residence Hall, Ph II - 2007B Refunded Portion</td>
<td>6,344</td>
<td>6,344 (785)</td>
<td>5,559</td>
<td>06/01/20-25</td>
</tr>
<tr>
<td>Construct Residence Hall, Ph II - 2006B Refunded Portion</td>
<td>2,761</td>
<td>2,352</td>
<td>—</td>
<td>2,352</td>
<td>06/01/23-26</td>
</tr>
<tr>
<td>Housing Renovations, Ph I - 2005A Refunded Portion</td>
<td>570</td>
<td>349</td>
<td>—</td>
<td>349</td>
<td>06/01/25-30</td>
</tr>
<tr>
<td>Radford University</td>
<td>Construct Residence Hall, Ph II - 2007B Refunded Portion</td>
<td>6,344</td>
<td>6,344 (785)</td>
<td>5,559</td>
<td>06/01/20-25</td>
</tr>
<tr>
<td>Construct Residence Hall, Ph II - 2006B Refunded Portion</td>
<td>2,761</td>
<td>2,352</td>
<td>—</td>
<td>2,352</td>
<td>06/01/23-26</td>
</tr>
<tr>
<td>Housing Renovations, Ph I - 2005A Refunded Portion</td>
<td>570</td>
<td>349</td>
<td>—</td>
<td>349</td>
<td>06/01/25-30</td>
</tr>
<tr>
<td>University of Maryland Washington</td>
<td>Washington Hall</td>
<td>5,040</td>
<td>4,130 (210)</td>
<td>3,920</td>
<td>06/01/20-33</td>
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<tr>
<td>Seabobek Dining Hall - 2005A Refunded Portion</td>
<td>565</td>
<td>344</td>
<td>—</td>
<td>344</td>
<td>06/1/2025</td>
</tr>
<tr>
<td>Virginia Commonwealth University</td>
<td>Monroe Park Housing - 2007B Refunded Portion</td>
<td>3,252</td>
<td>3,252 (405)</td>
<td>2,847</td>
<td>06/01/20-25</td>
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<tr>
<td>Virginia Polytechnic Institute and State University</td>
<td>Construct New Residence Hall - 2007A Refunded Portion</td>
<td>7,842</td>
<td>7,842 (727)</td>
<td>7,115</td>
<td>06/01/20-27</td>
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<tr>
<td>Improve Residence and Dining Halls - 2007A Refunded Portion</td>
<td>3,576</td>
<td>3,576 (333)</td>
<td>3,243</td>
<td>06/01/20-27</td>
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<tr>
<td>Virginia State University</td>
<td>Parking Projects - 2006B Refunded Portion</td>
<td>217</td>
<td>183</td>
<td>—</td>
<td>183</td>
</tr>
<tr>
<td>Construct Dining Hall - 2006B Refunded Portion</td>
<td>1,431</td>
<td>1,319</td>
<td>—</td>
<td>1,319</td>
<td>06/01/23-26</td>
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<tr>
<td>Construct Residence Hall - 2007A Refunded Portion</td>
<td>1,132</td>
<td>1,132 (104)</td>
<td>1,028</td>
<td>06/01/20-27</td>
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<tr>
<td>Construct Residence Halls - 2006B Refunded Portion</td>
<td>5,541</td>
<td>4,719</td>
<td>—</td>
<td>4,719</td>
<td>06/01/23-26</td>
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<tr>
<td>Construct Two Residence Halls - 2007B Refunded Portion</td>
<td>11,231</td>
<td>11,231 (1,394)</td>
<td>9,837</td>
<td>06/01/20-25</td>
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</tr>
</tbody>
</table>

**Subtotal Series 2013 Bonds**

| Total | 107,980 | 98,720 (6,590) | 92,130 |

#### Series 2014 Bonds

<table>
<thead>
<tr>
<th>University</th>
<th>Description</th>
<th>Amount issued</th>
<th>Outstanding June 30, 2018</th>
<th>Issued (Retired) During Year</th>
<th>Outstanding June 30, 2019</th>
<th>Maturity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christopher Newport University</td>
<td>New Residence Hall - 2004B Refunded Portion</td>
<td>8,147</td>
<td>3,091 (1,531)</td>
<td>1,560</td>
<td>06/01/20</td>
<td></td>
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<tr>
<td>Residence Hall II - 2004B Refunding Portion</td>
<td>4,210</td>
<td>974</td>
<td>—</td>
<td>—</td>
<td>06/01/20</td>
<td></td>
</tr>
<tr>
<td>College Of William and Mary</td>
<td>Renovate Dormitories - 2004B Refunding Portion</td>
<td>1,666</td>
<td>633 (312)</td>
<td>321</td>
<td>06/01/20</td>
<td></td>
</tr>
<tr>
<td>Renovate Dormitories</td>
<td>9,005</td>
<td>7,800 (345)</td>
<td>7,455</td>
<td>06/01/20-34</td>
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</tr>
<tr>
<td>George Mason University</td>
<td>Housing Building V - 2004B Refunding Portion</td>
<td>8,306</td>
<td>2,393 (1,186)</td>
<td>1,207</td>
<td>06/01/20</td>
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</tr>
<tr>
<td>Student Housing VIII</td>
<td>2,235</td>
<td>1,935 (85)</td>
<td>1,850</td>
<td>06/01/20-34</td>
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<tr>
<td>James Madison University</td>
<td>Bluestone Dormitory Phase II- 2004B Refunding Portion</td>
<td>1,985</td>
<td>754 (373)</td>
<td>381</td>
<td>06/01/20</td>
<td></td>
</tr>
</tbody>
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*(Continued from previous page)*

For the Fiscal Year Ended June 30, 2019

(Dollars in Thousands)
## General Obligation Debt (continued)

### Section 9(c) Debt (continued)

#### Higher Educational Institution bonds (Component Units) (continued)

<table>
<thead>
<tr>
<th>Series 2014 Bonds (continued)</th>
<th>Amount issued</th>
<th>Outstanding June 30, 2018</th>
<th>Issued (Retired) During Year</th>
<th>Outstanding June 30, 2019</th>
<th>Maturity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Housing Phase I</td>
<td>46,660</td>
<td>40,435</td>
<td>(1,800)</td>
<td>38,635</td>
<td>06/01/20-34</td>
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<tr>
<td>Longwood University</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Dining Hall - 2004B Refunding Portion</td>
<td>934</td>
<td>218</td>
<td>(218)</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Residence Hall Improvements - 2004B Refunding Portion</td>
<td>880</td>
<td>203</td>
<td>(203)</td>
<td>—</td>
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<tr>
<td>Radford University</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Renovate Residence Halls</td>
<td>11,080</td>
<td>9,600</td>
<td>(425)</td>
<td>9,175</td>
<td>06/01/20-34</td>
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<tr>
<td>University of Mary Washington</td>
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<td></td>
</tr>
<tr>
<td>Residence Hall Renovation - 2004B Refunding Portion</td>
<td>656</td>
<td>247</td>
<td>(123)</td>
<td>124</td>
<td>6/1/2020</td>
</tr>
<tr>
<td>University of Virginia</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Residence Hall - Monroe Lane - 2004B Refunding Portion</td>
<td>1,595</td>
<td>605</td>
<td>(298)</td>
<td>307</td>
<td>6/1/2020</td>
</tr>
<tr>
<td>Residence Hall - Wise - 2004B Refunding Portion</td>
<td>1,512</td>
<td>350</td>
<td>(350)</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Virginia Polytechnic Institute and State University</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dining Hall HVAC - 2004B Refunding Portion</td>
<td>587</td>
<td>137</td>
<td>(137)</td>
<td>—</td>
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<tr>
<td><strong>Subtotal Series 2014 Bonds</strong></td>
<td>97,458</td>
<td>69,375</td>
<td>(3,380)</td>
<td>61,015</td>
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</tr>
</tbody>
</table>

| Series 2015 Bonds              |                 |                          |                             |                          |         |
| Christopher Newport University  |                 |                          |                             |                          |         |
| Construct Residential Housing   | 18,860          | 17,565                   | (895)                      | 16,870                   | 06/01/20-35 |
| Expand Dining Hall              | 8,960           | 8,340                    | (330)                      | 8,010                    | 06/01/20-35 |
| College of William and Mary     |                 |                          |                             |                          |         |
| Renovate Graduate St. - 2008B Ref Portion | 1,482         | 1,482                    | (117)                      | 1,365                    | 06/01/20-28 |
| Renovate Dormitories            | 10,980          | 9,925                    | (395)                      | 9,530                    | 06/01/20-35 |
| George Mason University         |                 |                          |                             |                          |         |
| Construct Housing VII & Entrance Road - 2007B Ref Portion | 6,817         | 6,255                    | —                          | 6,255                    | 06/01/26-32 |
| Construct Student Housing VII - 2006B Refunding Portion | 11,765         | 11,765                   | —                          | 11,765                   | 06/01/27-31 |
| Construct Student Housing VII - 2007B Refunding Portion | 854           | 781                      | —                          | 781                      | 06/01/26-32 |
| Renovate President Park, Phase II - 2008B Refunding Portion | 1,999         | 1,999                    | (161)                      | 1,838                    | 06/01/20-28 |
| Student Housing VII - 2008B Refunding Portion | 1,366         | 1,366                    | (64)                       | 1,302                    | 06/01/20-33 |
| Student Housing VII - C - 2008B Refunding Portion | 17,566        | 17,566                   | (832)                      | 16,734                   | 06/01/20-33 |
| James Madison University        |                 |                          |                             |                          |         |
| Construct Dining Hall - 2007B Refunding Portion | 3,850         | 2,649                    | —                          | 2,649                    | 06/01/26-27 |
| Construct New Residence Hall - 2008B Refunding Portion | 11,695        | 11,695                   | (934)                      | 10,761                   | 06/01/20-28 |
| Renovate Bluestone Residence Hall, Ph 3 - 2007B Ref Portion | 403           | 291                      | —                          | 291                      | 06/01/26-27 |
| Longwood University             |                 |                          |                             |                          |         |
| Renovate Cox Hall - 2007B Refunding Portion | 1,089         | 791                      | —                          | 791                      | 06/01/26-27 |
| Renovate Cox Hall - 2008B Refunding Portion | 2,785         | 2,785                    | (225)                      | 2,560                    | 06/01/20-28 |
| Old Dominion University         |                 |                          |                             |                          |         |
| Construct Residence Hall, Phase II - 2007B Refunding Portion | 2,827         | 2,050                    | —                          | 2,050                    | 06/01/26-27 |
| Quad Housing Phase II - 2008B Refunding Portion | 24,074        | 24,074                   | (1,923)                     | 22,151                   | 06/01/20-28 |
| Radford University              |                 |                          |                             |                          |         |
| Renovate Residence Halls        | 8,820           | 7,970                    | (315)                      | 7,655                    | 06/01/20-35 |
| Virginia Commonwealth University |                |                          |                             |                          |         |
| Monroe Park Housing - 2007B Refunding Portion | 6,806         | 6,411                    | —                          | 6,411                    | 06/01/26-37 |
| Virginia Polytechnic Institute and State University |            |                          |                             |                          |         |
| New Residence Hall - 2006B Refunding Portion | 10,671        | 10,671                   | (851)                      | 9,820                    | 06/01/20-28 |
| Parking Auxiliary Project - 2008B Refunding Portion | 921           | 921                      | (73)                       | 848                      | 06/01/20-28 |
| Virginia State University       |                 |                          |                             |                          |         |
| Construct Two Residence Halls - 2007B Refunding Portion | 4,995         | 3,623                    | —                          | 3,623                    | 06/01/26-27 |
| **Subtotal Series 2015 Bonds** | 159,385         | 150,975                  | (6,915)                     | 144,060                  |         |

Continued on next page
Tax-Supported Debt – Detail of Long-term Indebtedness (1) (Continued from previous page)

For the Fiscal Year Ended June 30, 2019
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Series</th>
<th>Amount issued</th>
<th>Outstanding June 30, 2018</th>
<th>Issued (Retired) During Year</th>
<th>Outstanding June 30, 2019</th>
<th>Maturity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td>General Obligation Debt</td>
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<td></td>
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<td>Section 9(c) Debt (continued)</td>
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<td>Higher Educational Institution bonds (Component Units) (continued)</td>
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<td>Series 2016 Bonds</td>
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<td>Christopher Newport University</td>
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<td>Dorm &amp; Dining Hall 1996 Ref - 2006A Refunding Portion</td>
<td>750</td>
<td>460</td>
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<td>George Mason University</td>
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<td>Housing VIII - 09B Refunding Portion</td>
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<td>Student Housing VII-C - 2009B Refunding Portion</td>
<td>6,190</td>
<td>6,190</td>
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<td>James Madison University</td>
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<tr>
<td>Construct Dining Hall</td>
<td>53,700</td>
<td>50,945</td>
<td>(1,875)</td>
<td>49,070</td>
<td>06/01/20-36</td>
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<tr>
<td>Renovate and Upgrade Dormitories</td>
<td>7,875</td>
<td>7,270</td>
<td>(410)</td>
<td>6,860</td>
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<td>Radford University</td>
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<td>Renovate Residence Halls</td>
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<td>6,540</td>
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<td>Richard Bland College</td>
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<td>Convert Humanities &amp; Social Science Building to Student Housing</td>
<td>2,465</td>
<td>2,380</td>
<td>(90)</td>
<td>2,290</td>
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<td>Improve Residence &amp; Dining Halls - 2009B Refunding Portion</td>
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<td>Renovate Dormitories</td>
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<td>Construct Dining Hall</td>
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<td>Construct Residential Housing</td>
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<td>Subtotal Series 2018 Bonds</td>
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<td>74,120</td>
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<td>836,874</td>
<td>56,232</td>
<td>893,106</td>
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<td>Transportation Facilities Bonds (Primary Government)</td>
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<td>Series 2016, Coleman Refunding 1996 Ref - 2006A Refunding Portion</td>
<td>13,185</td>
<td>8,060</td>
<td>(2,560)</td>
<td>5,500</td>
<td>06/01/20-21</td>
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<td>Unamortized Premium</td>
<td>—</td>
<td>854</td>
<td>(293)</td>
<td>561</td>
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<td>Subtotal Transportation Facilities Bonds</td>
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<td>8,914</td>
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<td>Parking Facilities Bonds (Primary Government)</td>
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<td>(665)</td>
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<td>1,380</td>
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<td>1,088</td>
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<td>Subtotal Parking Facilities Bonds</td>
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<td>907,734</td>
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<td>Total General Obligation Debt</td>
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<td>1,313,402</td>
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<td>1,309,607</td>
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310 Commonwealth of Virginia
<table>
<thead>
<tr>
<th>Series</th>
<th>Amount issued</th>
<th>Outstanding June 30, 2018</th>
<th>Issued (Retired) During Year</th>
<th>Outstanding June 30, 2019</th>
<th>Maturity</th>
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<tbody>
<tr>
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<td><strong>Section 9(d) Debt</strong></td>
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<tr>
<td>Virginia Public Building Authority Bonds (Primary Government)</td>
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<tr>
<td>Series 2005D</td>
<td>50,000</td>
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<td>(3,815)</td>
<td>12,885</td>
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<td>31,960</td>
<td>(15,580)</td>
<td>16,380</td>
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<td>3,930</td>
<td>(910)</td>
<td>3,020</td>
<td>08/01/19-21</td>
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<td>Series 2009D Refunding</td>
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<td>16,415</td>
<td>(5,575)</td>
<td>10,840</td>
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<td>256,710</td>
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<td>(14,400)</td>
<td>213,900</td>
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<td>(8,805)</td>
<td>39,850</td>
<td>08/01/19-22</td>
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<tr>
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<td>(11,370)</td>
<td>37,725</td>
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<td>14,075</td>
<td>(805)</td>
<td>13,270</td>
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<td>53,085</td>
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<td>26,120</td>
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<td>Series 2014C Refunding</td>
<td>298,390</td>
<td>216,965</td>
<td>(30,425)</td>
<td>186,540</td>
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<tr>
<td>Series 2015A</td>
<td>232,980</td>
<td>218,340</td>
<td>(7,890)</td>
<td>210,450</td>
<td>08/01/19-35</td>
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<td>134,730</td>
<td>106,095</td>
<td>(10,170)</td>
<td>95,925</td>
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<td>199,920</td>
<td>(6,830)</td>
<td>193,090</td>
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<td>178,955</td>
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<td>08/01/19-36</td>
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For the Fiscal Year Ended June 30, 2019
(Dollars in Thousands)

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<th>Issued (Retired) During Year</th>
<th>Outstanding June 30, 2019</th>
<th>Maturity</th>
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<td>Virginia College Building Authority Bonds (Component Unit)</td>
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<td>21st Century College Program</td>
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<td>110,220</td>
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<td>324,285</td>
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(1) Pursuant to GASB Statement No. 34, *Basic Financial Statements – and Management’s Discussion and Analysis – for State and Local Governments*, Governmental Activities include internal service funds.
The financial presentations included in this section present detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about the Commonwealth’s overall financial health.

Statistical schedules related to property taxes are not presented since the Commonwealth does not assess property taxes.

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Financial Trends ................................................................. 317

These schedules contain trend information to help the reader understand how the Commonwealth’s financial performance and well-being have changed over time.

- Ten-Year Schedule of Revenues and Expenditures – Modified Accrual Basis – General Governmental Revenues by Source and Expenditures by Function
- Net Position by Component – Accrual Basis of Accounting
- Changes in Net Position – Accrual Basis of Accounting
- Fund Balance, Governmental Funds – Modified Accrual Basis of Accounting
- Changes in Fund Balance, Governmental Funds – Modified Accrual Basis of Accounting
- Comparison of General Fund Balance

Revenue Capacity ............................................................... 331

These schedules contain information to help the reader assess the factors affecting the Commonwealth’s ability to generate its income taxes.

- Personal Income Tax Rates
- Effective Tax Rates
- Personal Income Tax Filers and Liability by Income Level
- Personal Income by Industry
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Debt Capacity .................................................................. 339

These schedules present information to help the reader assess the affordability of the Commonwealth’s current levels of outstanding debt and the Commonwealth’s ability to issue debt in the future.

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- Ratios of General Obligation Bonded Debt Outstanding
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Demographic and Economic Information .............................. 345

These schedules offer demographic and economic indicators to help the reader understand the environment within which the Commonwealth’s financial activities take place and to help make comparisons over time and with other governments.

- Schedule of Demographic and Economic Statistics
- Principal Employers

Operating Information ......................................................... 347

These schedules contain information about the Commonwealth’s operations and resources to help the reader understand how the Commonwealth’s financial information relates to the services the Commonwealth provides and the activities it performs.

- State Employees by Function
- Operating Indicators by Function
- Capital Asset Statistics by Function

Employees of the Department of Accounts ........................... 356

Sources: Unless otherwise noted, the information in these schedules is derived from the comprehensive annual financial reports for the relevant year.
## Ten-Year Schedule of Revenues and Expenditures – Modified Accrual Basis
### General Governmental Revenues by Source and Expenditures by Function

For Fiscal Year Ended June 30

(Dollars in Millions)

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(1) General Government expenditure amounts include debt service principal retirement and interest charges.

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### Net Position by Component

#### Accrual Basis of Accounting

#### Last Ten Fiscal Years

(Dollars in Millions)

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(1) Beginning with fiscal year 2013, GASB Statement No. 63 changed the title of Invested in Capital Assets, Net of Related Debt to Net Investment in Capital Assets. Balances reported in prior fiscal years were not affected.

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## Changes in Net Position
### Accrual Basis of Accounting

#### Last Ten Fiscal Years
(Dollars in Millions)

#### Expenses

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## Changes in Net Position
### Accrual Basis of Accounting (Continued from previous page)

**Last Ten Fiscal Years**

(Dollars in Millions)

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### Business-type Activities:

| Other Taxes | 9 | 9 | 9 | 9 |
| Investment Earnings | 2 | 1 | 1 | 1 |
| Miscellaneous | — | — | — | — |
| Special Items | — | — | — | — |
| Transfers     | (875) | (827) | (770) | (787) |
| Total Business-type Activities:                  | (864) | (817) | (760) | (777) |
| Total Primary Government                           | $ 26,402 | $ 24,938 | $ 23,627 | $ 22,740 |

### Change in Net Position

| Governmental Activities | $ 2,473 | $ 1,436 | $ 1,106 | $ 569 |
| Business-type Activities | 405 | 147 | 352 | 207 |
| Total Primary Government | $ 2,878 | $ 1,583 | $ 1,458 | $ 776 |

Source: Department of Accounts
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### Modified Accrual Basis of Accounting

**Last Ten Fiscal Years**  
(Dollars in Millions)

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<td>$ 5,259</td>
<td>$ 4,537</td>
<td>$ 3,092</td>
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</table>

(1) GASB Statement No. 54 changes in fund balance information presented in this section began with fiscal year 2011. Fund balances prior to fiscal year 2011 were not reclassified because this was deemed impractical. The nature of the difference between fiscal year 2011 forward and all prior years relates to fund balances for those prior years not being reclassified to GASB Statement No. 54 fund classifications. For additional information on fund balance classifications, see Note 3, Fund Balance Classifications.

Source: Department of Accounts
<table>
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<tr>
<th>Year</th>
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<th>2013</th>
<th>2012</th>
<th>2011</th>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>—</td>
</tr>
</tbody>
</table>

| Total | $3,469 | $3,278 | $3,557 | $3,917 | $3,469 | $3,270 |
### Changes in Fund Balance, Governmental Funds

**Modified Accrual Basis of Accounting**

**Last Ten Fiscal Years**  
(Dollars in Millions)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenues</strong></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Taxes</td>
<td>$25,676</td>
<td>$24,319</td>
<td>$22,963</td>
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<td>Rights and Privileges</td>
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<td>1,021</td>
<td>977</td>
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<td>Institutional Revenue</td>
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<td>233</td>
<td>241</td>
<td>267</td>
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<tr>
<td>Interest, Dividends, Rents, and Other Investment Income</td>
<td>360</td>
<td>159</td>
<td>146</td>
<td>134</td>
</tr>
<tr>
<td>Federal Grants and Contracts</td>
<td>11,999</td>
<td>10,537</td>
<td>10,392</td>
<td>9,885</td>
</tr>
<tr>
<td>Other</td>
<td>1,566</td>
<td>2,396</td>
<td>1,632</td>
<td>1,535</td>
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<tr>
<td><strong>Total Revenues</strong></td>
<td>40,940</td>
<td>38,725</td>
<td>36,395</td>
<td>35,094</td>
</tr>
</tbody>
</table>

| **Expenditures**     |          |          |          |          |
| General Government   | 2,774    | 2,692    | 2,691    | 2,821    |
| Education            | 10,448   | 10,129   | 9,816    | 9,373    |
| Transportation       | 5,455    | 6,015    | 5,732    | 5,817    |
| Resources and Economic Development | 1,015 | 926 | 981 | 915 |
| Individual and Family Services | 16,954 | 15,641 | 14,805 | 14,186 |
| Administration of Justice | 3,086 | 3,044 | 2,875 | 2,801 |
| Capital Outlay       | 616      | 504      | 381      | 331      |
| Debt Service:        |          |          |          |          |
| Principal Retirement | 427      | 433      | 413      | 424      |
| Interest and Charges | 321      | 295      | 281      | 282      |
| **Total Expenditures** | 41,096  | 39,679   | 37,975   | 36,950   |
| Revenues Over (Under) Expenditures | (156) | (954) | (1,580) | (1,856) |

| **Other Financing Sources (Uses)** |          |          |          |          |
| Transfers In           | 1,989    | 1,913    | 1,731    | 1,673    |
| Transfers Out          | (1,106)  | (1,086)  | (959)    | (884)    |
| Notes Issued           | 19       | 15       | 8        | 4        |
| Insurance Recoveries   | 2        | 4        | 1        | 1        |
| Capital Leases Issued  | 1        | 1        | 2        | 1        |
| Bonds Issued           | 648      | 1,280    | 685      | 274      |
| Premium on Debt Issuance | 83    | 367      | 174      | 45       |
| Refunding Bonds Issued | 43       | 1,062    | 276      | 76       |
| Sale of Capital Assets | 7        | 22       | 11       | 15       |
| Payments to Refunded Bond Escrow Agents | (49) | (1,271) | (331) | (93) |
| **Total Other Financing Sources (Uses)** | 1,837   | 2,307   | 1,598   | 1,112   |

| **Net Change in Fund Balances** | $1,481 | $1,353 | $18 | $(744) |

**Debt Service as a Percentage of Noncapital Expenditures (1)**  
1.92%  
1.95%  
2.01%  
2.05%

(1) Noncapital expenditures exclude expenditures for capital outlay, which are recorded by function. The majority of these expenditures were for Transportation.

Source: Department of Accounts
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</thead>
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<td></td>
<td>$21,557</td>
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<td>(1,030)</td>
<td>(810)</td>
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<td>(940)</td>
<td>(1,097)</td>
<td>(876)</td>
<td>(1,022)</td>
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<td>883</td>
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<td>(373)</td>
<td>(55)</td>
<td>(146)</td>
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<td>1,096</td>
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<td>1,622</td>
<td>1,595</td>
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<td>$(276)</td>
<td>$(227)</td>
<td>$1,020</td>
<td>$812</td>
<td>$(154)</td>
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<tr>
<td></td>
<td>2.22%</td>
<td>2.21%</td>
<td>2.58%</td>
<td>2.29%</td>
<td>2.30%</td>
<td>2.04%</td>
</tr>
</tbody>
</table>
## Comparison of General Fund Balance

Last Ten Fiscal Years  
(Dollars in Millions)

<table>
<thead>
<tr>
<th>Fiscal Year Ended June 30,</th>
<th>Fund Balance</th>
<th>Budgetary Basis</th>
<th>Modified Accrual Basis</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>$ 2,799.3</td>
<td>$ 1,602.7</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>1,787.0</td>
<td>843.5</td>
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<tr>
<td>2017</td>
<td>1,339.9</td>
<td>498.4</td>
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</tr>
<tr>
<td>2016</td>
<td>1,478.4</td>
<td>710.3</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>1,759.2</td>
<td>848.4</td>
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<tr>
<td>2014</td>
<td>1,349.3</td>
<td>629.6</td>
<td></td>
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<td>1,820.6</td>
<td>637.9</td>
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<td>2012</td>
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<td>2011</td>
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<td></td>
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<tr>
<td>2010</td>
<td>870.9</td>
<td>(674.3)</td>
<td></td>
</tr>
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</table>

Source: Department of Accounts
**Personal Income Tax Rates**

Last Ten Fiscal Years  
(Dollars in Millions)

<table>
<thead>
<tr>
<th>For the Fiscal Year Ended June 30,</th>
<th>Personal Income Tax Collections (1)</th>
<th>Personal Income (2)(3)</th>
<th>Average Effective Rate (3)(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>$15,226</td>
<td>$503,525</td>
<td>3.02%</td>
</tr>
<tr>
<td>2018</td>
<td>14,106</td>
<td>480,074</td>
<td>2.94%</td>
</tr>
<tr>
<td>2017</td>
<td>13,053</td>
<td>458,896</td>
<td>2.84%</td>
</tr>
<tr>
<td>2016</td>
<td>12,556</td>
<td>446,751</td>
<td>2.81%</td>
</tr>
<tr>
<td>2015</td>
<td>12,329</td>
<td>432,785</td>
<td>2.85%</td>
</tr>
<tr>
<td>2014</td>
<td>11,253</td>
<td>410,473</td>
<td>2.74%</td>
</tr>
<tr>
<td>2013</td>
<td>11,340</td>
<td>405,848</td>
<td>2.79%</td>
</tr>
<tr>
<td>2012</td>
<td>10,613</td>
<td>396,552</td>
<td>2.68%</td>
</tr>
<tr>
<td>2011</td>
<td>9,944</td>
<td>376,231</td>
<td>2.64%</td>
</tr>
<tr>
<td>2010</td>
<td>9,088</td>
<td>355,743</td>
<td>2.55%</td>
</tr>
</tbody>
</table>

(1) Tax revenues from individual and fiduciary income tax.  
(2) Personal income amounts provided by U.S. Bureau of Economic Analysis website.  
(3) Amounts for fiscal years 2010 through 2018 were revised to reflect the incorporation of newly available and revised source data, as well as improved estimating methodologies.  
(4) Average effective rate equals tax collections divided by income.  

Sources:  
Department of Taxation  
U.S. Bureau of Economic Analysis  

**Effective Tax Rates (1)**  
Tax Years 2009 through 2018

<table>
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<tr>
<th>Income Tax Bracket</th>
<th>Tax Rate</th>
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<td>$0 - $3,000</td>
<td>2.00%</td>
</tr>
<tr>
<td>$3,000 - $5,000</td>
<td>2.00% - 2.40%</td>
</tr>
<tr>
<td>$5,000 - $17,000</td>
<td>2.40% - 4.23%</td>
</tr>
<tr>
<td>$17,000 - $30,000</td>
<td>4.23% - 4.89%</td>
</tr>
<tr>
<td>$30,000 - $50,000</td>
<td>4.89% - 5.23%</td>
</tr>
<tr>
<td>$50,000 - $100,000</td>
<td>5.23% - 5.49%</td>
</tr>
<tr>
<td>Over $100,000</td>
<td>5.49% up to 5.75%</td>
</tr>
</tbody>
</table>

(1) Amounts shown are for all filing status returns.  
Source: Department of Taxation
## Personal Income Tax Filers and Liability by Income Level (1) (2)

**Current Tax Year and Ten Years Ago**

<table>
<thead>
<tr>
<th>Income Level</th>
<th>Tax Year Ended December 31, 2017</th>
<th></th>
<th>Tax Year Ended December 31, 2008</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Returns</td>
<td>% of Total</td>
<td>Income Tax Liability</td>
<td>% of Total</td>
</tr>
<tr>
<td>$100,000 and higher</td>
<td>799,599</td>
<td>20.4%</td>
<td>$8,542,839,999</td>
<td>69.2%</td>
</tr>
<tr>
<td>$75,000 - $99,999</td>
<td>334,855</td>
<td>8.5%</td>
<td>1,234,018,541</td>
<td>10.0%</td>
</tr>
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<td>$50,000 - $74,999</td>
<td>511,778</td>
<td>13.1%</td>
<td>1,227,684,208</td>
<td>10.0%</td>
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<td>$25,000 - $49,999</td>
<td>883,857</td>
<td>22.6%</td>
<td>1,070,569,211</td>
<td>8.7%</td>
</tr>
<tr>
<td>$10,000 - $24,999</td>
<td>742,217</td>
<td>18.9%</td>
<td>262,568,501</td>
<td>2.1%</td>
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<tr>
<td>$9,999 and lower</td>
<td>645,453</td>
<td>16.5%</td>
<td>4,738,781</td>
<td>0.0%</td>
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<tr>
<td><strong>Total</strong></td>
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<td><strong>100.0%</strong></td>
<td><strong>$12,342,418,241</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

(1) Due to confidentiality issues, the names of the ten largest revenue payers are not available. The categories presented are intended to provide alternative information regarding the sources of the state’s revenue.

(2) Tax year 2017 is the most recent year for which data are available.

Source: Department of Taxation
<table>
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<tr>
<td>Farm Earnings</td>
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<td>$334</td>
<td>$355</td>
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<td>482</td>
<td>469</td>
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<td>Mining</td>
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<td>633</td>
<td>427</td>
<td>265</td>
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<td>15,703</td>
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<tr>
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<td>12,785</td>
<td>12,588</td>
<td>12,831</td>
</tr>
<tr>
<td>State and Local Government</td>
<td>38,224</td>
<td>36,992</td>
<td>35,970</td>
<td>35,189</td>
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<tr>
<td>Other (3)</td>
<td>159,241</td>
<td>150,326</td>
<td>142,469</td>
<td>137,511</td>
</tr>
<tr>
<td><strong>Total Personal Income</strong></td>
<td>$503,525</td>
<td>$480,074</td>
<td>$458,896</td>
<td>$446,751</td>
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</tbody>
</table>

(1) Personal income figures for fiscal year 2019 are estimated.
(2) Amounts for fiscal years 2010 through 2018 were revised to reflect the incorporation of newly available and revised source data.
(3) Includes dividends, interest, rental income, residence adjustment, government transfers to individuals, and deductions for social insurance.

Source: U.S. Bureau of Economic Analysis (BEA)

Note: Details may not agree to BEA due to rounding.
<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>$</td>
<td>555</td>
<td>$ 732</td>
<td>$ 712</td>
<td>$ 663</td>
<td>$ 520</td>
<td>$ 356</td>
</tr>
<tr>
<td>410</td>
<td>516</td>
<td>756</td>
<td>987</td>
<td>1,063</td>
<td>950</td>
<td>755</td>
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<td>16,626</td>
<td>18,200</td>
<td>17,354</td>
<td>16,919</td>
<td>16,319</td>
<td>15,857</td>
<td>15,580</td>
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<tr>
<td>18,074</td>
<td>10,419</td>
<td>9,963</td>
<td>9,808</td>
<td>9,730</td>
<td>9,490</td>
<td>9,023</td>
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<tr>
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<td>23,026</td>
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<td>12,967</td>
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<td>13,596</td>
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<td>33,973</td>
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<td>132,243</td>
<td>32,620</td>
<td>31,433</td>
<td>29,847</td>
<td>29,526</td>
<td>29,576</td>
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<tr>
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<td>432,785</td>
<td>$ 410,473</td>
<td>$ 405,848</td>
<td>$ 396,552</td>
<td>$ 376,231</td>
<td>$ 355,743</td>
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<td>--------</td>
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<td>--------</td>
<td>--------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcoholic Beverage</td>
<td>$762</td>
<td>$784</td>
<td>$658</td>
<td>$718</td>
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<td>Apparel</td>
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<td>4,986</td>
<td>5,049</td>
<td>5,001</td>
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<td>Automotive</td>
<td>3,448</td>
<td>3,234</td>
<td>3,238</td>
<td>3,159</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food</td>
<td>32,935</td>
<td>31,908</td>
<td>31,564</td>
<td>30,627</td>
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<td>Fuel</td>
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<td>2,144</td>
<td>1,967</td>
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<td>Hotels, Motels, Tourist Camps, etc.</td>
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<td>292</td>
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<td>2,520</td>
<td>2,225</td>
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<td>Total</td>
<td>$106,049</td>
<td>$103,577</td>
<td>$101,679</td>
<td>$100,216</td>
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</tr>
</tbody>
</table>

Direct Sales Tax Rate (2) 5.3% 5.3% 5.3% 5.3%

(1) Retail sales information is available only on a calendar-year basis.
(2) Effective July 1, 2013, the sales tax rate increased from 5.0 percent to 5.3 percent.
(3) Some prior year amounts may have been revised to reflect the incorporation of newly available and revised source data

Source: Department of Taxation
Weldon Cooper Center for Public Service, University of Virginia
<table>
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<td>$</td>
<td>676</td>
<td>640</td>
<td>559</td>
<td>567</td>
<td>545</td>
<td>532</td>
</tr>
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<tr>
<td>4,918</td>
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<td>6,545</td>
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<td>2,945</td>
<td>2,860</td>
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<td>27,924</td>
<td>27,150</td>
<td>25,691</td>
<td>24,617</td>
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<td>1,899</td>
<td>1,828</td>
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<td>21,693</td>
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<td>21,852</td>
<td>21,568</td>
<td>20,635</td>
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<tr>
<td>3,238</td>
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<td>3,107</td>
<td>2,988</td>
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<td>2,804</td>
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<tr>
<td>8,589</td>
<td></td>
<td>8,513</td>
<td>8,112</td>
<td>7,750</td>
<td>7,652</td>
<td>7,369</td>
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<td>303</td>
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<td>300</td>
<td>357</td>
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<td>17,994</td>
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<tr>
<td>85,866</td>
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</tr>
<tr>
<td>5.3 %</td>
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<td>5.3 %</td>
<td></td>
<td>5.0 %</td>
<td></td>
<td>5.0 %</td>
</tr>
<tr>
<td>5.0 %</td>
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<td>5.0 %</td>
<td></td>
<td>5.0 %</td>
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<td>5.0 %</td>
</tr>
<tr>
<td>5.0 %</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.0 %</td>
</tr>
</tbody>
</table>
## Sales Tax Revenue by Business Class (1)

**Tax Year 2018 and Nine Years Ago**

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Filers</th>
<th>% of Total</th>
<th>Tax Liability</th>
<th>% of Total</th>
<th>Number of Filers</th>
<th>% of Total</th>
<th>Tax Liability</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcoholic Beverage</td>
<td>426</td>
<td>0.4%</td>
<td>$761,552,946</td>
<td>0.7%</td>
<td>332</td>
<td>0.3%</td>
<td>$532,480,521</td>
<td>0.6%</td>
</tr>
<tr>
<td>Apparel</td>
<td>3,860</td>
<td>3.6%</td>
<td>5,060,549,375</td>
<td>4.8%</td>
<td>4,195</td>
<td>3.9%</td>
<td>4,493,619,271</td>
<td>5.2%</td>
</tr>
<tr>
<td>Automotive</td>
<td>2,974</td>
<td>2.9%</td>
<td>3,447,823,831</td>
<td>3.3%</td>
<td>3,256</td>
<td>3.1%</td>
<td>2,396,542,163</td>
<td>2.8%</td>
</tr>
<tr>
<td>Food</td>
<td>22,845</td>
<td>22.4%</td>
<td>32,934,683,862</td>
<td>31.1%</td>
<td>20,264</td>
<td>19.0%</td>
<td>24,133,855,028</td>
<td>28.1%</td>
</tr>
<tr>
<td>Fuel</td>
<td>2,385</td>
<td>2.3%</td>
<td>2,318,536,869</td>
<td>2.2%</td>
<td>2,892</td>
<td>2.7%</td>
<td>1,582,080,805</td>
<td>1.8%</td>
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<tr>
<td>Furniture, Home Furnishings, and Equipment</td>
<td>2,235</td>
<td>2.2%</td>
<td>2,228,014,365</td>
<td>2.1%</td>
<td>3,223</td>
<td>3.0%</td>
<td>1,978,611,051</td>
<td>2.3%</td>
</tr>
<tr>
<td>General Merchandise</td>
<td>15,327</td>
<td>15.1%</td>
<td>21,830,728,944</td>
<td>20.6%</td>
<td>16,033</td>
<td>15.0%</td>
<td>19,576,996,167</td>
<td>22.6%</td>
</tr>
<tr>
<td>Hotels, Motels, Tourist Farms, etc.</td>
<td>2,384</td>
<td>2.3%</td>
<td>3,857,216,436</td>
<td>3.6%</td>
<td>2,173</td>
<td>2.0%</td>
<td>2,804,207,006</td>
<td>3.3%</td>
</tr>
<tr>
<td>Lumber, Building Materials, and Supply</td>
<td>5,308</td>
<td>5.2%</td>
<td>9,666,620,798</td>
<td>9.0%</td>
<td>6,006</td>
<td>5.6%</td>
<td>7,368,949,821</td>
<td>8.6%</td>
</tr>
<tr>
<td>Machinery, Equipment, and Supply</td>
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<td>289,774,078</td>
<td>0.2%</td>
<td>167</td>
<td>0.2%</td>
<td>173,166,732</td>
<td>0.2%</td>
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<tr>
<td>Miscellaneous</td>
<td>36,973</td>
<td>36.3%</td>
<td>21,215,065,474</td>
<td>20.0%</td>
<td>39,733</td>
<td>37.3%</td>
<td>17,320,317,590</td>
<td>20.2%</td>
</tr>
<tr>
<td>Other Miscellaneous and Unidentifiable</td>
<td>6,998</td>
<td>6.9%</td>
<td>2,538,284,145</td>
<td>2.4%</td>
<td>8,390</td>
<td>7.9%</td>
<td>3,505,215,919</td>
<td>4.1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>101,869</td>
<td>100.0%</td>
<td>$106,048,851,123</td>
<td>100.0%</td>
<td>106,664</td>
<td>100.0%</td>
<td>$85,866,042,074</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

(1) Due to confidentiality issues, the names of the ten largest revenue payers are not presented. The categories presented are intended to provide alternative information regarding the sources of the state’s revenue.

(2) Tax year 2018 is the most recent year for which data are available.

Sources: Weldon Cooper Center for Public Service, University of Virginia
## Ratios of Outstanding Debt by Type

Last Ten Fiscal Years  
(Amounts in Thousands except Per Capita)

<table>
<thead>
<tr>
<th>For the Fiscal Year Ended June 30,</th>
<th>Governmental Activities</th>
<th>Business-type Activities</th>
</tr>
</thead>
<tbody>
<tr>
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<td>General Obligation Bonds</td>
<td>Non-General Obligation Bonds</td>
</tr>
<tr>
<td>2019 $416,501</td>
<td>$6,982,091</td>
<td>$749,490</td>
</tr>
<tr>
<td>2018 476,528</td>
<td>7,274,962</td>
<td>171,180</td>
</tr>
<tr>
<td>2017 538,211</td>
<td>6,245,009</td>
<td>188,640</td>
</tr>
<tr>
<td>2016 601,632</td>
<td>5,826,798</td>
<td>200,227</td>
</tr>
<tr>
<td>2015 675,371</td>
<td>5,911,768</td>
<td>222,877</td>
</tr>
<tr>
<td>2014 742,869</td>
<td>5,555,935</td>
<td>233,002</td>
</tr>
<tr>
<td>2013 791,992</td>
<td>5,593,228</td>
<td>285,594</td>
</tr>
<tr>
<td>2012 873,741</td>
<td>5,703,448</td>
<td>326,543</td>
</tr>
<tr>
<td>2011 960,374</td>
<td>4,701,764</td>
<td>348,972</td>
</tr>
<tr>
<td>2010 1,049,386</td>
<td>4,120,056</td>
<td>366,170</td>
</tr>
</tbody>
</table>

(1) Pension, compensated absences, other postemployment benefits, other liabilities, lottery prizes payable, tuition benefits payable, and pollution remediation obligations have been excluded.  
(2) Personal income amounts used for this calculation were obtained from the U. S. Bureau of Economic Analysis.  
(3) Population statistics used in this calculation were provided by the Department of Taxation and the Weldon Cooper Center for Public Service at the University of Virginia. Fiscal year 2019 population was estimated.  

Sources:  
Department of Accounts  
Department of Taxation  
U. S. Bureau of Economic Analysis
### Ratios of General Obligation Bonded Debt Outstanding

Last Ten Fiscal Years  
(Amounts in Thousands except Per Capita)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Governmental 9(b) [3]</td>
<td>9(c) [4]</td>
<td>Higher Education [5] 9(c)</td>
</tr>
<tr>
<td>2019</td>
<td>$ 401,873</td>
<td>$ 14,628</td>
<td>$ 893,106</td>
</tr>
<tr>
<td>2018</td>
<td>457,764</td>
<td>18,764</td>
<td>836,874</td>
</tr>
<tr>
<td>2017</td>
<td>515,468</td>
<td>22,743</td>
<td>897,018</td>
</tr>
<tr>
<td>2016</td>
<td>571,915</td>
<td>29,717</td>
<td>877,118</td>
</tr>
<tr>
<td>2015</td>
<td>642,181</td>
<td>33,190</td>
<td>936,857</td>
</tr>
<tr>
<td>2014</td>
<td>706,192</td>
<td>36,677</td>
<td>925,086</td>
</tr>
<tr>
<td>2013</td>
<td>752,493</td>
<td>39,499</td>
<td>877,858</td>
</tr>
<tr>
<td>2012</td>
<td>831,148</td>
<td>42,593</td>
<td>906,474</td>
</tr>
<tr>
<td>2011</td>
<td>914,574</td>
<td>45,800</td>
<td>765,280</td>
</tr>
<tr>
<td>2010</td>
<td>999,841</td>
<td>49,545</td>
<td>631,275</td>
</tr>
</tbody>
</table>

[1] Beginning with fiscal year 2014, GASB Statement No. 65 removed deferrals of debt defeasance from the debt balances. Balances reported in prior fiscal years netted the deferrals against the debt balances. Amounts are net of unamortized premiums, discounts, deferrals on debt defeasance, and/or issuance expenses.  

[2] There are currently no Section 9(a) bonds outstanding.  

[3] Section 9(b) bonds have been authorized by the citizens of Virginia through bond referenda to finance capital projects. These bonds are retired through the use of state appropriations.  

[4] Section 9(c) bonds are issued to finance capital projects which, when completed, will generate revenue to repay the debt.  

[5] While these bonds are issued for and allocated to institutions, they are backed by the full faith and credit of the Commonwealth.  

[6] Individual and fiduciary Income tax collections were used for this calculation.  

[7] Population statistics used in this calculation are provided by the Department of Taxation and the Weldon Cooper Center for Public Service at the University of Virginia. Fiscal year 2019 population was estimated.

Source: Department of Accounts
### Computation of Legal Debt Limit and Margin

**Last Ten Fiscal Years**

(Dollars in Thousands)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Taxes on Income and Retail Sales:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$19,718,337</td>
<td>$18,794,741</td>
<td>$17,600,400</td>
<td>$16,971,972</td>
</tr>
</tbody>
</table>

Average Tax Revenues (Three Fiscal Years) $18,704,493 $17,789,038 $17,106,934 $16,376,822

### Section 9(a) General Obligation Debt Limit [4]

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(30% of 1.15 times annual tax revenues)</td>
<td>$6,802,826</td>
<td>$6,484,186</td>
<td>$6,072,138</td>
<td>$5,855,330</td>
</tr>
<tr>
<td>Less Bonds Outstanding:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Debt Issuance Margin for Section 9(a) [2]</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Obligation Bonds</td>
<td>$6,802,826</td>
<td>$6,484,186</td>
<td>$6,072,138</td>
<td>$5,855,330</td>
</tr>
<tr>
<td>Debt Applicable to Limit as a % Limit</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

### Section 9(b) General Obligation Debt Limit

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(1.15 times average tax revenues for three fiscal years)</td>
<td>$21,510,167</td>
<td>$20,457,393</td>
<td>$19,672,974</td>
<td>$18,833,345</td>
</tr>
<tr>
<td>Less Bonds Outstanding:**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation Facilities Refunding Bonds [5] [6]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Debt Issuance Margin for Section 9(b)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Obligation Bonds</td>
<td>$21,108,294</td>
<td>$19,999,629</td>
<td>$19,157,506</td>
<td>$18,261,430</td>
</tr>
<tr>
<td>Debt Applicable to Limit as a % Limit</td>
<td>1.87%</td>
<td>2.24%</td>
<td>2.62%</td>
<td>3.04%</td>
</tr>
</tbody>
</table>

### Additional Section 9(b) Debt Borrowing Restriction:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>$5,377,542</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less 9(b) Debt authorized in past three fiscal years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Maximum Additional Borrowing Restriction (amount that may be authorized by the General Assembly)</strong></td>
<td>$5,377,542</td>
<td>$5,114,348</td>
<td>$4,918,244</td>
<td>$4,708,336</td>
</tr>
</tbody>
</table>

### Section 9(c) General Obligation Debt Limit

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(1.15 times average tax revenues for three fiscal years)</td>
<td>$21,510,167</td>
<td>$20,457,393</td>
<td>$19,672,974</td>
<td>$18,833,345</td>
</tr>
<tr>
<td>Less Bonds Outstanding:**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parking Facilities Bonds [6]</td>
<td>8,567</td>
<td>9,850</td>
<td>11,101</td>
<td>15,155</td>
</tr>
<tr>
<td>Transportation Facilities Bonds [6]</td>
<td>6,061</td>
<td>8,914</td>
<td>11,642</td>
<td>14,562</td>
</tr>
<tr>
<td><strong>Debt Issuance Margin for Section 9(c)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Obligation Bonds</td>
<td>$20,602,433</td>
<td>$19,601,755</td>
<td>$18,753,213</td>
<td>$17,926,510</td>
</tr>
<tr>
<td>Debt Applicable to Limit as a % Limit</td>
<td>4.22%</td>
<td>4.18%</td>
<td>4.68%</td>
<td>4.82%</td>
</tr>
</tbody>
</table>

**Bonds included on this schedule are only those which are backed by the full faith and credit of the Commonwealth.**

[1] Includes taxes imposed pursuant to Articles 2 and 9 of Chapter 3, Title 58.1 of the Code of Virginia.
[2] Includes taxes imposed pursuant to Article 10 of Chapter 3, Title 58.1 of the Code of Virginia.
[3] Includes taxes imposed pursuant to Chapter 6, Title 58.1 of the Code of Virginia, less taxes identified in Sections 58.1-605 and 58.1-638.
[4] Debt limit applies only to debt authorized pursuant to Article X, Section 9(a)(2) of the Constitution of Virginia.
[5] These bonds refunded certain Section 9(c) debt, and because the Governor did not certify the feasibility of the refinanced project, it must be applied against the Section 9(b) Debt Limit.
[6] Beginning with fiscal year 2014, GASB Statement No. 65 removed deferrals of debt defeasance from the debt balances. Balances reported in prior fiscal years netted the deferrals against the debt balances. Net of unamortized discounts, premiums, and/or deferral on debt defeasance.

Sources: Department of Accounts
Department of the Treasury
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$12,328,675</td>
<td>$11,253,348</td>
<td>$11,339,965</td>
<td>$10,612,836</td>
<td>$9,944,370</td>
<td>$9,088,252</td>
</tr>
<tr>
<td></td>
<td>831,907</td>
<td>757,491</td>
<td>796,728</td>
<td>859,923</td>
<td>822,259</td>
<td>806,473</td>
</tr>
<tr>
<td></td>
<td>3,587,849</td>
<td>3,399,223</td>
<td>3,419,489</td>
<td>3,314,677</td>
<td>3,190,452</td>
<td>3,264,210</td>
</tr>
<tr>
<td></td>
<td>$16,748,431</td>
<td>$15,410,062</td>
<td>$15,556,182</td>
<td>$14,787,436</td>
<td>$13,957,081</td>
<td>$13,158,935</td>
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<tr>
<td></td>
<td>$15,904,892</td>
<td>$15,251,227</td>
<td>$14,766,900</td>
<td>$13,967,817</td>
<td>$13,453,996</td>
<td>$13,543,258</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>$18,290,626</td>
<td>$17,538,911</td>
<td>$16,981,935</td>
<td>$16,062,990</td>
<td>$15,472,096</td>
<td>$15,574,747</td>
</tr>
<tr>
<td></td>
<td>642,181</td>
<td>706,192</td>
<td>752,493</td>
<td>831,148</td>
<td>914,574</td>
<td>993,372</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>6,469</td>
</tr>
<tr>
<td></td>
<td>$17,648,445</td>
<td>$16,832,719</td>
<td>$16,229,442</td>
<td>$15,231,842</td>
<td>$14,557,522</td>
<td>$14,574,906</td>
</tr>
<tr>
<td></td>
<td>3.51%</td>
<td>4.03%</td>
<td>4.43%</td>
<td>5.17%</td>
<td>5.91%</td>
<td>6.42%</td>
</tr>
<tr>
<td></td>
<td>$4,572,656</td>
<td>$4,384,728</td>
<td>$4,245,484</td>
<td>$4,015,747</td>
<td>$3,868,024</td>
<td>$3,893,687</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>$4,572,656</td>
<td>$4,384,728</td>
<td>$4,245,484</td>
<td>$4,015,747</td>
<td>$3,868,024</td>
<td>$3,893,687</td>
</tr>
<tr>
<td></td>
<td>$18,290,626</td>
<td>$17,538,911</td>
<td>$16,981,935</td>
<td>$16,062,990</td>
<td>$15,472,096</td>
<td>$15,574,747</td>
</tr>
<tr>
<td></td>
<td>16,036</td>
<td>17,045</td>
<td>17,538</td>
<td>18,383</td>
<td>19,445</td>
<td>21,151</td>
</tr>
<tr>
<td></td>
<td>17,154</td>
<td>19,632</td>
<td>21,961</td>
<td>24,210</td>
<td>26,355</td>
<td>28,394</td>
</tr>
<tr>
<td></td>
<td>936,857</td>
<td>925,086</td>
<td>877,858</td>
<td>906,474</td>
<td>765,280</td>
<td>631,275</td>
</tr>
<tr>
<td></td>
<td>$17,320,579</td>
<td>$16,577,148</td>
<td>$16,064,578</td>
<td>$15,113,923</td>
<td>$14,661,016</td>
<td>$14,893,927</td>
</tr>
<tr>
<td></td>
<td>5.30%</td>
<td>5.48%</td>
<td>5.40%</td>
<td>5.91%</td>
<td>5.24%</td>
<td>4.37%</td>
</tr>
</tbody>
</table>
### Schedule of Pledged Revenue Bond Coverage

Primary Government 9(d) General Long-term Debt

#### Last Ten Fiscal Years

(Dollars in Thousands except Coverage)

<table>
<thead>
<tr>
<th>For the Fiscal Year Ended June 30</th>
<th>Beginning Balance, as restated (1)</th>
<th>Pledged Revenues</th>
<th>Operating Expenses (2)</th>
<th>Net Available for Debt Service</th>
<th>Debt Service Requirements (3) (4)</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Route 460 Funding Corporation of Virginia (4) (5)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>$</td>
<td>—</td>
<td>$</td>
<td>—</td>
<td>$</td>
<td>—</td>
</tr>
<tr>
<td>2018</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>(Series 2012A and 2012B CAB)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>2016</td>
<td>1,261</td>
<td>—</td>
<td>436</td>
<td>825</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>2015</td>
<td>(20,991)</td>
<td>—</td>
<td>524</td>
<td>(21,515)</td>
<td>—</td>
<td>11,726</td>
</tr>
<tr>
<td>2014</td>
<td>(8,958)</td>
<td>—</td>
<td>448</td>
<td>(9,406)</td>
<td>—</td>
<td>12,084</td>
</tr>
<tr>
<td>2013</td>
<td>—</td>
<td>—</td>
<td>130</td>
<td>(130)</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

(1) The Route 460 Funding Corporation of Virginia was restated due to the implementation of GASB Statement No. 65 in fiscal year 2014.

(2) Operating expenses are exclusive of principal and interest.

(3) Includes principal and interest of revenue bonds only. Does not include debt defeasance transactions.

(4) This entity was established in fiscal year 2013. No debt service payments were required during fiscal year 2013.

(5) The Route 460 Funding Corporation of Virginia continuing operations ceased during fiscal year 2016.

Source: Department of Accounts
Schedule of Demographic and Economic Statistics

Last Ten Fiscal Years

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Population In Thousands (1)</th>
<th>Personal Income In Thousands (2)(3)</th>
<th>Per Capita Income (3)</th>
<th>Public Primary and Secondary School Enrollment</th>
<th>Unemployment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>8,566</td>
<td>$503,523,403</td>
<td>$58,782</td>
<td>1,298,083</td>
<td>2.9 %</td>
</tr>
<tr>
<td>2018</td>
<td>8,481</td>
<td>480,073,267</td>
<td>56,606</td>
<td>1,290,513</td>
<td>3.3 %</td>
</tr>
<tr>
<td>2017</td>
<td>8,470</td>
<td>458,896,890</td>
<td>54,179</td>
<td>1,293,049</td>
<td>4.0 %</td>
</tr>
<tr>
<td>2016</td>
<td>8,412</td>
<td>446,748,985</td>
<td>53,109</td>
<td>1,267,591</td>
<td>4.1 %</td>
</tr>
<tr>
<td>2015</td>
<td>8,383</td>
<td>432,784,615</td>
<td>51,626</td>
<td>1,279,773</td>
<td>4.9 %</td>
</tr>
<tr>
<td>2014</td>
<td>8,326</td>
<td>410,470,527</td>
<td>49,300</td>
<td>1,273,211</td>
<td>5.2 %</td>
</tr>
<tr>
<td>2013</td>
<td>8,260</td>
<td>405,848,686</td>
<td>49,134</td>
<td>1,264,880</td>
<td>5.6 %</td>
</tr>
<tr>
<td>2012</td>
<td>8,186</td>
<td>396,552,026</td>
<td>48,443</td>
<td>1,258,521</td>
<td>6.0 %</td>
</tr>
<tr>
<td>2011</td>
<td>8,097</td>
<td>376,229,162</td>
<td>46,465</td>
<td>1,253,038</td>
<td>6.5 %</td>
</tr>
<tr>
<td>2010</td>
<td>8,026</td>
<td>355,744,649</td>
<td>44,324</td>
<td>1,245,937</td>
<td>7.0 %</td>
</tr>
</tbody>
</table>

(1) Population figures are estimated.
(2) Personal income amount for fiscal year 2019 is estimated.
(3) Amounts for fiscal years 2010 through 2018 were revised to reflect the incorporation of newly available and revised source data, as well as improved estimating methodologies.

Sources: Department of Education
Department of Taxation
Virginia Employment Commission
U.S. Bureau of Economic Analysis
Weldon Cooper Center for Public Service at the University of Virginia

Principal Employers (1)

Current Year and Nine Years Ago (2)

<table>
<thead>
<tr>
<th>Employer</th>
<th>2018</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Department of Defense</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Wal-Mart</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Fairfax County Public Schools</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Sentara Healthcare</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Huntington Ingalls Industries, Inc.</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Food Lion</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>U. S. Postal Service</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>County of Fairfax</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Inova Health System (3)</td>
<td>9</td>
<td>-</td>
</tr>
<tr>
<td>U. S. Department of Homeland Defense (3)</td>
<td>10</td>
<td>-</td>
</tr>
</tbody>
</table>

(1) The Virginia Employment Commission is precluded from disclosing the actual number of employees per the Confidential Information Protection and Statistical Efficiency Act – Title V of Public Law 107-347. All Employers above have an employment size of 1,000 or more.
(2) Calendar year 2018 is the most recent information available.
(3) Previous ranking not available.

Source: Virginia Employment Commission (1)
### State Employees by Function (1)

#### Last Ten Fiscal Years

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(1) Includes salaried and wage employees but excludes adjunct faculty.
(2) Totals have been rounded and may vary slightly from the Department of Human Resource Management reports.

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### Operating Indicators by Function

#### Last Ten Fiscal Years

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### Operating Indicators by Function (Continued from previous page)

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<td>276,560,578</td>
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<tr>
<td>Number of Plays Sold - Pick 4</td>
<td>326,360,467</td>
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<tr>
<td>Number of Plays Sold - Cash 5</td>
<td>33,818,907</td>
<td>33,202,456</td>
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<tr>
<td>Number of Plays Sold - Megamillions</td>
<td>166,953,172</td>
<td>130,782,622</td>
<td>84,351,249</td>
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<td>Number of Plays Sold - Win for Life (3)</td>
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<tr>
<td>Number of Plays Sold - Decades of Dollars (3)</td>
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<td>Number of Plays Sold - Millionaire Raffle</td>
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<td>Number of Plays Sold - Powerball (4)</td>
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<td>Number of Plays Sold - Money Ball (6) (7)</td>
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<tr>
<td>Number of Plays Sold - Cash 4 Life (6)</td>
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<td>50,562,452</td>
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<td>Number of Tickets Sold - Digital E-games (9)</td>
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<th>Activity</th>
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<th>2017</th>
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<td><strong>Virginia College Savings Plan</strong></td>
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<td>Number of Virginia529 Prepaid529 Tuition Contractholders</td>
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(1) Information for fiscal year 2019 is not yet available.
(2) This agency is structured to provide services primarily in a community setting. Although they have a significant amount of capital and operating costs in facility operations, inpatient treatment methodology is being deemphasized over time. Their inpatient census will continue to decline in the future. Over $250 million of community funding (state and Federal dollars) each fiscal year supports 40 community services boards across the Commonwealth. These entities serve approximately 300,000 Virginians each year.
(3) Win for Life and Decades for Dollars ended during fiscal year 2015; therefore, information for fiscal year 2016 and thereafter is not available.
(4) Powerball began during fiscal year 2010; therefore, information for fiscal year 2009 and prior years is not available.
(5) Bank A Million began during fiscal year 2016; therefore, information for fiscal year 2015 and prior years is not available.
(6) Money Ball and Cash 4 Life began during fiscal year 2015; therefore, information for fiscal year 2014 and prior years is not available.
(7) Money Ball ended during fiscal year 2016; therefore, information for fiscal year 2017 and thereafter is not available.
(8) Fast Play Bingo was renamed Print ‘n Play during fiscal year 2017.
(9) Digital E-games, which are available through the Lottery Mobile App, began during fiscal year 2019; therefore, information for fiscal 2018 and prior is not available.
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Sources: Compensation Board  
Comprehensive Services for At-Risk Youth and Families  
Department for Aging and Rehabilitative Services  
Department of Agriculture and Consumer Services  
Department of Behavioral Health and Developmental Services  
Department of Corrections  
Department of Education  
Department of Environmental Quality  
Department of Forestry  
Department of Health  
Department of Housing and Community Development  
Department of Medical Assistance Services  
Department of Social Services  
Department of State Police  
Department of Taxation  
Department of Transportation  
State Council of Higher Education  
Supreme Court  
Virginia College Savings Plan  
Virginia Employment Commission  
Virginia Lottery
## Capital Asset Statistics by Function (1)

### Last Ten Fiscal Years

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<tr>
<th>Function</th>
<th>Department</th>
<th>Number of Buildings</th>
<th>Total Square Footage of Buildings</th>
<th>Vehicles</th>
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<td>Department of State Police</td>
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(1) Information not yet available for fiscal year 2019.
(2) Includes storage sheds
(3) Includes cabins

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354 Commonwealth of Virginia
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Sources: Department of Conservation and Recreation, Department of Forestry, Department of Motor Vehicles, Department of State Police, Department of Transportation, Department of the Treasury, State Council of Higher Education for Virginia.
Employees of the Department of Accounts


This report was prepared by staff of the Virginia Department of Accounts and printed on a Konica Minolta 554e at a cost of $3.16 per copy.

This report is available for download from Department of Accounts’ website. Our Internet address is www.doa.virginia.gov.
COMMONWEALTH OF VIRGINIA

SINGLE AUDIT REPORT

FOR THE YEAR ENDED

JUNE 30, 2019

Auditor of Public Accounts
Martha S. Mavredes, CPA
www.apa.virginia.gov
(804) 225-3350
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<td>Notes to the Schedule of Expenditures of Federal Awards</td>
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<td>Appendix III: Acronyms for Auditor’s Section</td>
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AUDITOR’S SECTION
EXECUTIVE SUMMARY

The results of our financial statement audit of the Commonwealth of Virginia for the year ended June 30, 2019, are summarized as follows:

- we issued an unmodified opinion on the basic financial statements;
- we found certain matters that we consider to be material weaknesses or significant deficiencies in internal control over financial reporting; and
- we identified instances of noncompliance or other matters required to be reported under Government Auditing Standards related to the basic financial statements.

The results of our single audit of the Commonwealth of Virginia for the year ended June 30, 2019, are summarized as follows:

- we issued an unmodified opinion on the Commonwealth’s compliance with requirements applicable to each major federal program;
- we found certain matters and instances of noncompliance with selected provisions, which are required to be reported in accordance with the Uniform Guidance, 2 C.F.R. Part 200;
- we did not identify any matters that we consider to be material weaknesses in internal control over compliance;
- we found certain matters that we consider to be significant deficiencies in internal control over compliance; and
- the Schedule of Expenditures of Federal Awards is fairly stated in all material respects in relation to the financial statements as a whole.

Our audit findings, along with a summary of the views of officials, are reported in the accompanying “Schedule of Findings and Questioned Costs.” Consistent with prior years, unabridged views of responsible officials concerning audit findings are in the report related to their agency, which can be found at www.apa.virginia.gov. Management’s Corrective Action Plan will be available from the Federal Audit Clearinghouse web site and the Virginia Department of Accounts’ web site at www.doa.virginia.gov.
February 7, 2020

The Honorable Ralph S. Northam
Governor of Virginia

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

We are pleased to submit the Commonwealth of Virginia Single Audit Report for the fiscal year ended June 30, 2019.

This report contains our:

- report on internal control over financial reporting and compliance;
- report on compliance for each major federal program;
- report on internal control over compliance;
- report on the Schedule of Expenditures of Federal Awards; and
- resulting Schedule of Findings and Questioned Costs.

Additionally, this report contains management's:

- Summary Schedule of Prior Audit Findings; and
- Schedule of Expenditures of Federal Awards, with footnotes.

The Commonwealth’s Comprehensive Annual Financial Report for the year ended June 30, 2019, and our report thereon have been issued under separate cover.

As in previous years, we included two listings of all findings in Appendix I of this report. The first list organizes all findings by topical area and the second list organizes all findings by the applicable entity. Additionally, because information security findings are a substantial number of the Commonwealth’s findings, we continue to provide additional information about these findings. The Commonwealth of Virginia’s Information Security Standard, SEC 501 (Security Standard) adopts the Information System Security Control Families (families) from the National Institute of Standards and Technology (NIST). The Security Standard uses these families to organize the controls that the Commonwealth is required to apply to its information systems. According to NIST, a family “contains security controls related to the general security topic of the family. Security controls may involve aspects of policy, oversight, supervision, manual processes, actions by individuals, or automated mechanisms implemented by information systems and devices.”

Chart 1 on the next page shows the categories for all non-information system security findings and Chart 2 shows the control families impacted by the issues reported in the information system security findings.
Of the 53 findings above in Chart 1, four represent weaknesses that are material to the Commonwealth’s Comprehensive Annual Financial Report. Additionally, there are 55 information system security findings represented in Chart 2 below. Consistent with recent years, access control represents approximately one third of the weaknesses related to information system security.

Note: Twelve findings reported deficiencies with multiple control families. For this graph, these deficiencies are broken-out and included to the total of each control family impacted.
We would like to express our appreciation to the many individuals whose efforts assisted in preparing this report and recognize the Commonwealth’s management and federal program and financial staff for their cooperation and assistance in resolving single audit issues.

Martha S. Mavredes  
Martha S. Mavredes  
AUDITOR OF PUBLIC ACCOUNTS

GDS/clj
INDEPENDENT AUDITOR’S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States, the financial statements of the governmental activities, the business-type activities, the aggregate discretely presented component units, each major fund, and the aggregate remaining fund information of the Commonwealth of Virginia, as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the Commonwealth's basic financial statements, and have issued our report thereon dated December 13, 2019. Our report includes a reference to other auditors who audited the financial statements of the Virginia College Savings Plan (major fund and private purpose trust fund), which is discussed on pages 53 and 262 of the financial statements, and certain blended and discretely presented component units of the Commonwealth, as described in our report on the Commonwealth’s financial statements and Note 1.B. of the financial statements. This report does not include the results of the other auditors’ testing of internal control over financial reporting or compliance and other matters that are reported on separately by those auditors. The financial statements of the Science Museum of Virginia Foundation, Virginia Museum of Fine Arts Foundation, Library of Virginia Foundation, and Danville Science Center, Inc, which were audited by other auditors upon whose reports we are relying, were audited in accordance with auditing standards generally accepted in the United States of America, but not in accordance with Government Auditing Standards.

Internal Control Over Financial Reporting

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

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and; therefore, material weaknesses or significant deficiencies may exist that have not been identified. However, as described in the accompanying Schedule of Findings and Questioned Costs, we identified certain deficiencies in internal control that we consider to be material weaknesses and significant deficiencies.
A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A **MATERIAL WEAKNESS** is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity’s financial statements will not be prevented, or detected and corrected on a timely basis. We consider the deficiencies in internal control over financial reporting in the accompanying Schedule of Findings and Questioned Costs, labeled with the following numbers and titles, to be **material weaknesses**:

<table>
<thead>
<tr>
<th>Finding Number</th>
<th>Finding Title</th>
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<tr>
<td>2019-001</td>
<td>Improve Controls Over Financial Reporting</td>
</tr>
<tr>
<td>2019-002</td>
<td>Strengthen Controls over Year-End Accrual Reporting</td>
</tr>
<tr>
<td>2019-003</td>
<td>Improve Financial Reporting for Accounts Receivable</td>
</tr>
<tr>
<td>2019-004</td>
<td>Improve Controls over SNAP Payments</td>
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</tbody>
</table>

A **SIGNIFICANT DEFICIENCY** is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance. We consider the deficiencies in the accompanying Schedule of Findings and Questioned Costs, labeled with the following numbers, to be **significant deficiencies**:

Finding Numbers: 2019-

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Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Commonwealth's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed instances of NONCOMPLIANCE or OTHER MATTERS that are required to be reported under Government Auditing Standards and which are described in the accompanying Schedule of Findings and Questioned Costs labeled with the following numbers:

Finding Numbers: 2019-

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We noted certain additional matters involving internal control over financial reporting and immaterial instances of noncompliance that we have reported to the management of the individual state agencies and institutions.

Commonwealth’s Response to Findings

The Commonwealth’s written response to the findings consist of both the responsible official’s response and management’s Corrective Action Plan. A copy of the responsible official’s response, containing the views of the responsible officials, if provided, is in the report related to their agency, which can be found at www.apa.virginia.gov. The views of responsible officials are summarized under each respective finding in the accompanying Schedule of Findings and Questioned Costs. Additionally, management’s Corrective Action Plan will be available from the Federal Audit Clearinghouse web site and the Virginia Department of Accounts’ web site at www.doa.virginia.gov. Management’s Corrective Action Plan was not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on it.
Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Martha S. Mavredes
Martha S. Mavredes
AUDITOR OF PUBLIC ACCOUNTS
RICHMOND, VA
December 13, 2019
INDEPENDENT AUDITOR’S
REPORT ON COMPLIANCE FOR EACH MAJOR FEDERAL PROGRAM;
REPORT ON INTERNAL CONTROL OVER COMPLIANCE; AND
REPORT ON SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
REQUIRED BY THE UNIFORM GUIDANCE

Report on Compliance for Each Major Federal Program

We have audited the Commonwealth of Virginia's compliance with the types of compliance requirements described in the U.S. Office of Management and Budget’s (OMB) Compliance Supplement that could have a direct and material effect on each of the Commonwealth's major federal programs for the year ended June 30, 2019. The Commonwealth’s major federal programs are identified in the Summary of Auditor’s Results section of the accompanying Schedule of Findings and Questioned Costs.

The Commonwealth’s basic financial statements include the operations of certain agencies and component units, which expended federal awards that are not included in the Commonwealth’s Schedule of Expenditures of Federal Awards for the year ended June 30, 2019. Our audit, described below, did not include the operations of these agencies and component units since they were audited by other auditors as discussed in Note 1 of the Notes to the Schedule of Expenditures of Federal Awards.

Management’s Responsibility

The Commonwealth’s management is responsible for compliance with federal statutes, regulations, and the terms and conditions of its federal awards applicable to its federal programs.

Auditor’s Responsibility

Our responsibility is to express an opinion on compliance for each of the Commonwealth's major federal programs based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. Code of Federal Regulations (C.F.R.) Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance). Those standards and the Uniform Guidance require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about the Commonwealth's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.
We believe that our audit provides a reasonable basis for our opinion on compliance for each major federal program. However, our audit does not provide a legal determination of the Commonwealth’s compliance.

**Opinion on Each Major Federal Program**

In our opinion, the Commonwealth complied, in all material respects, with the types of compliance requirements, referred to above, that could have a direct and material effect on each of its major federal programs, as identified in the Summary of Auditor’s Results section of the accompanying Schedule of Findings and Questioned Costs for the year ended June 30, 2019.

**Other Matters**

The results of our auditing procedures disclosed other instances of **NONCOMPLIANCE**, which are required to be reported in accordance with the Uniform Guidance and which are described in the accompanying Schedule of Findings and Questioned Costs labeled with the following numbers:

Finding Numbers: 2019-

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<tr>
<th>020</th>
<th>024</th>
<th>032</th>
<th>037</th>
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Our opinion on each major federal program is not modified with respect to these matters.

The Commonwealth’s written response to the noncompliance findings consist of both the responsible official’s response and management’s Corrective Action Plan. A copy of the responsible official’s response containing the views of the responsible officials, if provided, is in the report related to their agency, which can be found at [www.apa.virginia.gov](http://www.apa.virginia.gov). The views of responsible officials are summarized under each respective finding in the accompanying Schedule of Findings and Questioned Costs. Additionally, management’s Corrective Action Plan will be available from the Federal Audit Clearinghouse web site and the Virginia Department of Accounts’ web site at [www.doa.virginia.gov](http://www.doa.virginia.gov). Management’s Corrective Action Plan was not subjected to the auditing procedures applied in the audit of compliance and, accordingly, we express no opinion on it.

**Report on Internal Control Over Compliance**

Management of the Commonwealth is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered the Commonwealth's internal control over compliance with the types of requirements that could have a direct and material effect on each major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major federal program and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly,
we do not express an opinion on the effectiveness of the Commonwealth's internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A **MATERIAL WEAKNESS** in internal control over compliance is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. A **SIGNIFICANT DEFICIENCY** in internal control over compliance is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies and; therefore, material weaknesses or significant deficiencies may exist that have not been identified. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, we did identify certain deficiencies in internal control over compliance, described in the accompanying Schedule of Findings and Questioned Costs, labeled with the following numbers, that we consider to be significant deficiencies:

Finding Numbers: 2018-

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The Commonwealth’s written response to the internal control over compliance findings consist of both the responsible official’s response and management’s Corrective Action Plan. A copy of the responsible official’s response containing the views of the responsible officials, if provided, is in the report related to their agency, which can be found at [www.apa.virginia.gov](http://www.apa.virginia.gov). The views of responsible officials are summarized under each respective finding in the accompanying Schedule of Findings and Questioned Costs. Additionally, management’s Corrective Action Plan will be available from the Federal Audit Clearinghouse web site and the Virginia Department of Accounts’ web site at [www.doa.virginia.gov](http://www.doa.virginia.gov). Management’s Corrective Action Plan was not subjected to the auditing procedures applied in the audit of compliance and, accordingly, we express no opinion on it.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.
Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance

We have audited the financial statements of the governmental activities, the business-type activities, the aggregate discretely presented component units, each major fund, and the aggregate remaining fund information of the Commonwealth as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the Commonwealth’s basic financial statements. We issued our report thereon dated December 13, 2019, which contained unmodified opinions on those financial statements. We have not performed any procedures with respect to the audited financial statements subsequent to December 13, 2019. Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the basic financial statements. The accompanying Schedule of Expenditures of Federal Awards is presented for purposes of additional analysis as required by the Uniform Guidance and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedule of Expenditures of Federal Awards is fairly stated in all material respects in relation to the basic financial statements as a whole.

Martha S. Mavredes
Martha S. Mavredes
AUDITOR OF PUBLIC ACCOUNTS
RICHMOND, VA
February 7, 2020
**Financial Statements**

Type of report the auditor issued on whether the financial statements audited were prepared in accordance with GAAP: Unmodified

Internal control over financial reporting:
- Material weaknesses identified? Yes
- Significant deficiencies identified? Yes
- Noncompliance material to financial statements noted? No

**Federal Awards**

Internal control over major federal programs:
- Material weaknesses identified? No
- Significant deficiencies identified? Yes

Type of auditor’s report issued on compliance for major federal programs: Unmodified

Any audit findings disclosed that are required to be reported in accordance with 2 C.F.R. § 200.516(a)? Yes

Dollar threshold used to distinguish between Type A and Type B programs: $ 30,000,000

Commonwealth qualified as low-risk auditee? No

The major federal programs listed on the next page are in order by their Catalog of Federal Domestic Assistance (CFDA) number. The first CFDA number in a cluster is used to determine the cluster’s placement within the list. Only the CFDA numbers, in which the Commonwealth expended funds within a cluster, are listed on the next page.
The Commonwealth’s major federal programs are as follows:

<table>
<thead>
<tr>
<th>CFDA Number</th>
<th>Name of Federal Program or Cluster (Common Acronym)</th>
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<tbody>
<tr>
<td>10.553</td>
<td>Child Nutrition Cluster</td>
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<td>10.555</td>
<td>Child Nutrition Cluster</td>
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<td>10.556</td>
<td>Child Nutrition Cluster</td>
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<td>10.559</td>
<td>Child Nutrition Cluster</td>
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<td>17.207</td>
<td>Employment Service Cluster</td>
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<td>17.804</td>
<td>Employment Service Cluster</td>
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<tr>
<td>17.225</td>
<td>Unemployment Insurance</td>
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<tr>
<td>20.205</td>
<td>Highway Planning and Construction Cluster</td>
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<tr>
<td>20.219</td>
<td>Highway Planning and Construction Cluster</td>
</tr>
<tr>
<td>20.224</td>
<td>Highway Planning and Construction Cluster</td>
</tr>
<tr>
<td>66.458</td>
<td>Clean Water State Revolving Fund Cluster</td>
</tr>
<tr>
<td>84.010</td>
<td>Title I Grants to Local Educational Agencies</td>
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<tr>
<td>84.027</td>
<td>Special Education Cluster (IDEA)</td>
</tr>
<tr>
<td>84.173</td>
<td>Special Education Cluster (IDEA)</td>
</tr>
<tr>
<td>84.126</td>
<td>Rehabilitation Services Vocational Rehabilitation Grants to States</td>
</tr>
<tr>
<td>84.367</td>
<td>Improving Teacher Quality State Grants</td>
</tr>
<tr>
<td>93.268</td>
<td>Immunization Cooperative Agreements</td>
</tr>
<tr>
<td>93.558</td>
<td>Temporary Assistance for Needy Families (TANF) Cluster</td>
</tr>
<tr>
<td>93.569</td>
<td>Community Services Block Grant</td>
</tr>
<tr>
<td>93.658</td>
<td>Foster Care Title IV-E</td>
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<tr>
<td>93.659</td>
<td>Adoption Assistance</td>
</tr>
<tr>
<td>93.667</td>
<td>Social Services Block Grant</td>
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<tr>
<td>93.775</td>
<td>Medicaid Cluster</td>
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<tr>
<td>93.777</td>
<td>Medicaid Cluster</td>
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<tr>
<td>93.778</td>
<td>Medicaid Cluster</td>
</tr>
<tr>
<td>93.788</td>
<td>Opioid STR</td>
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<tr>
<td>93.917</td>
<td>HIV Care Formula Grants</td>
</tr>
<tr>
<td>93.959</td>
<td>Block Grants for Prevention and Treatment of Substance Abuse</td>
</tr>
<tr>
<td>96.001</td>
<td>Disability Insurance/SSI Cluster</td>
</tr>
</tbody>
</table>
Human Resource Management should continue to strengthen internal controls over financial reporting to ensure compliance with Governmental Accounting Standards Board (GASB) Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions (OPEB). As the administrator of the statewide Pre-Medicare Retiree Healthcare plan, Human Resource Management’s Contracts and Finance Department prepares and disseminates required financial reporting information to participating entities for inclusion in the participant’s individual financial statements. For the fiscal year ended June 30, 2019, Human Resource Management did not properly prepare the financial schedules to comply with all requirements of GASB Statement No. 75. The financial schedules prepared by Human Resource Management’s Contracts and Finance Department contained significant errors. The errors identified include:

- incorrectly including a beginning balance adjustment in the current year journal entries, which employers use in the preparation of their individual financial statements;
- adjusting journal entries not resulting in the proper ending OPEB liability for the individual employers;
- improperly excluding the amortization of prior year changes in proportion in the schedule of deferred inflows and outflows; and
- incorrect use of the expected benefit payments instead of the actual benefit payments for fiscal year 2018, which resulted in a difference of approximately $22.6 million.

Human Resource Management relies heavily on a third-party actuary to compile the required information necessary for the GASB Statement No. 75 financial reporting. The errors described above are a result of delays in Contracts and Finance providing necessary information to the actuary. These delays resulted in Contracts and Finance and Health Benefits Services not having sufficient time to review and analyze the actuary report and prepare the financial reporting information. Further, the contract with the actuary does not clearly define the scope, deliverables, or deadlines related to GASB Statement No. 75 reporting.
During fiscal year 2019, Human Resource Management developed internal deadlines related to the GASB Statement No. 75 reporting; however, many of these deadlines were not met. Further contributing to the errors in the financial information is Human Resource Management’s lack of a formal review process of the compiled information. Contracts and Finance and Health Benefits Services do not properly review the actuary report prior to the preparation of the financial schedules. A detailed review of the actuary report is necessary to ensure Human Resource Management identifies errors and omissions in a timely manner and to ensure that Human Resource Management agrees with the assumptions used by the actuary. We consider this to be a material weakness in internal control, as there is a reasonable possibility that Human Resource Management will not prevent, detect or correct material misstatements of the financial information and required disclosures in a timely manner.

Human Resource Management should modify the existing contract with the actuary, or procure a new contract, specific to the requirements and deadlines for the annual GASB Statement No. 75 reporting. Additionally, Contracts and Finance should work with Health Benefits Services to establish a formal review process for the actuary report, the financial information, and the required disclosures. The actuary report and disclosures both contain financial and program specific information that will require the coordination of these two service areas at Human Resource Management to properly review.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-002: Strengthen Controls over Year-End Accrual Reporting

Applicable to: Department of Medical Assistance Services

Prior Year Finding Number: 2018-009
Type of Finding: Internal Control
Severity of Deficiency: Material Weakness

Medical Assistance Services needs to strengthen controls over financial reporting information submitted to Accounts. Medical Assistance Services submits multiple supplemental information items to Accounts who then uses this information in preparation of the Commonwealth’s financial statements. The information submitted by Medical Assistance Services contained several material errors, which affected multiple accounts and funds as follows:

- Staff incorrectly classified a Private Hospital Enhanced Rate Payment liability, which resulted in a $139.2 million overstatement of the general fund claims payable liability and understatement of the Health Care Provider Payment Rate Assessment (Rate Assessment) fund claims payable liability. This error also impacted revenues and receivables in the Rate Assessment Fund.
• Staff incorrectly allocated the Medicaid expansion claims payable liability, which resulted in an $18.7 million overstatement of the federal fund claims payable liability and understatement of the Health Care Provider Coverage Assessment Fund claims payable liability.

• Staff’s methodology for calculating an estimate of a Private Hospital Enhanced Rate Payment liability was inadequate, which resulted in a $19.6 million overstatement of the federal fund claims payable liability and the federal fund receivable. This also resulted in a $17.5 million overstatement of the Rate Assessment Fund claims payable liability.

• Staff misclassified a portion of the Family Access to Medical Insurance Security (FAMIS) claims payable liability, which resulted in a $15.8 million overstatement of the total Medicaid claims payable liability and understatement of the total FAMIS claims payable liability.

• Staff incorrectly recorded an adjusting journal entry to reverse prior year activity, which resulted in a $26.1 million understatement of revenues and expenses in both the general and federal funds.

Medical Assistance Services’ financial activity is material to the Commonwealth’s financial statements, so it is essential for Medical Assistance Services to have strong financial reporting practices. Policies and procedures over financial reporting information, as a best practice, should be detailed and thorough with a sufficient review process to prevent and detect potential errors and omissions. Also, the Fiscal Division, Budget Division, and Provider Reimbursement Division should collaborate to complete the year-end accrual information reported to Accounts since the process relies on information from all three divisions. Lastly, when using accounting estimates in financial reporting, best practices dictate that management develop a sound methodology and document the basis for the methodology.

As a result of these errors, Medical Assistance Services staff had to resubmit multiple pieces of information to Accounts causing inefficiencies for Medical Assistance Services’ staff as well as delays for Accounts’ staff. There are multiple factors that contributed to these errors. First, there were significant changes in operations due to Medicaid expansion, and Medical Assistance Services did not properly consider all of the financial reporting implications of these changes. In addition, there has been significant turnover in key positions in both the Fiscal Division and Budget Division, which has caused a lack of consistency in staff preparing this information from year to year. Finally, a lack of communication between the Fiscal Division, Budget Division, and Provider Reimbursement Division also contributed to some of these errors.

Medical Assistance Services should strengthen its controls over the preparation of year-end financial reporting information for Accounts. They should consider incorporating a technical supervisory review into the process given the complexity of the information to ensure significant errors are detected and prevented. As part of preparing the information, the Fiscal Division, Budget Division, and Provider Reimbursement Division should collaborate as needed to ensure there is a common understanding of significant financial reporting policies and that submitted information is accurate. Given the significance of Medical Assistance Services’ financial activity, it is also important to consult with Accounts on financial...
reporting issues that may be complex or unusual to ensure both agencies have a thorough understanding of the nature of the activity and agree on the correct financial reporting treatment prior to submission of the information.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-003: Improve Financial Reporting for Accounts Receivable

Applicable to: Department of Medical Assistance Services

Prior Year Finding Number: N/A
Type of Finding: Internal Control
Severity of Deficiency: Material Weakness

Medical Assistance Services’ Fiscal Division needs to improve its reporting and management of accounts receivable. Medical Assistance Services has outstanding accounts receivable due at any given time from various parties for fraud restitution, overpayments, and amounts due from third party providers, as examples. The Fiscal Division estimates a portion of these receivables as uncollectible for year-end financial reporting purposes and reports this to Accounts; however, the methodology for the estimate is not formally documented. In addition, the methodology does not adequately consider the collectability of certain types of material receivables that are many years overdue, calling into question the soundness of the methodology and the accuracy of the estimate.

CAPP Manual Topic 20505 requires management to establish an allowance for doubtful accounts to reflect the amount of an agency's receivables that management estimates will be uncollectible. The method of establishing the allowance is left to the agency's discretion; however, the estimated allowance should be based upon historical data or other pertinent information relative to the receivables in question. Best practices also dictate that when accounting estimates are developed for financial reporting purposes, management is responsible for developing a sound methodology and documenting the basis for the methodology.

The lack of a sound and documented methodology for estimating uncollectible accounts impacts the accounts receivable information submitted to Accounts for year-end financial reporting. Given the age and amount of some of the receivables, it is likely the estimate is materially understated, which results in an overstatement of net accounts receivable. In addition, the lack of adequate documentation and data to support the methodology is also an issue in the event of employee turnover. In this case, turnover in the Accounts Receivable Manager position affected the Fiscal Division’s ability to allocate the resources needed to perform a review of this area and update its policies, procedures, and methodology.
The Fiscal Division should review and evaluate its current methodology for estimating uncollectible accounts, giving consideration to the various types of accounts. This review should include a robust and detailed analysis of historical collection data by type of receivable, as well as age of receivable, to support a revised percentage estimate for accounts receivable that will not be collected. In addition, the Fiscal Division should update its policies and procedures over the accounts receivable area to ensure the financial accounting and reporting processes are adequately documented and the methodology for the allowance estimate is sufficiently supported.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-004: Improve Controls over SNAP Payments

Applicable to: Department of Social Services

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Material Weakness

Social Services’ does not have sufficient controls over payments made for SNAP. Social Services’ case management system is used to determine who is eligible for SNAP and the benefit amounts. Social Services sends that information to a third-party vendor who gives the benefits to recipients via an Electronic Benefits Transfer (EBT) card and the vendor then draws down the funds from the federal government. The Division of Finance (Finance) completes a daily three-way reconciliation between Social Services’ case management system, the vendor’s system, and the federal payment system that is used to draw down federal funds. The reconciliation shows that the vendor’s system and the federal payment system had approximately $234 million more benefits given during fiscal year 2019 than the case management system reflects. In addition, this reconciliation is not reviewed or approved by a supervisor.

Social Services’ Division of Enterprise Systems (Enterprise Systems) and Finance did not resolve the discrepancies between the systems and; therefore, could not provide support for $234 million out of $1,013 million (23%) that was paid out by the vendor and drawn down from the federal government. Finance also used the amount paid out by the vendor when reporting revenue and expenditure amounts for the SNAP program to Accounts for use in the CAFR. Finally, while Social Services was relying on the vendor’s system to provide reporting for the CAFR, Social Services was not maintaining proper oversight of this vendor, see management recommendation entitled “Develop a Process to Maintain Oversight for Third-Party Providers” for more information on this issue. After we brought this issue to management’s attention, Finance and Enterprise Systems were able to work together to provide evidence that the total amount authorized by the case management system reasonably agreed to the total amount the vendor put on the EBT cards.
2 C.F.R. § 200.303(a) states that an entity must establish and maintain effective internal control over federal awards that provides reasonable assurance that the entity is managing the award in compliance with the federal statutes, regulations, and terms and conditions of the federal award. As an internal control, a supervisor should review each reconciliation and its support to ensure it is properly supported and accurate. In addition, 7 C.F.R. § 247.4 states that state agencies shall reconcile total funds entered into, exiting from, and remaining in the EBT system each day.

Finance did not investigate and resolve the discrepancies between Social Services’ case management system, amounts given to recipients, and drawn down from the federal government because there were known problems with the case management system that have not been addressed by Enterprise Systems. Without adequate controls over the reconciliation process requiring approvals, identifying and resolving discrepancies, and ensuring proper support for amounts drawn down from the federal government, it could create questions as to whether the nature of the payments are permissible and could lead to potential disallowed charges by the federal government. Additionally, by not addressing discrepancies noted during the reconciliation process, Finance increases the risk of inaccurate data being reported in the CAFR. We consider this a material weakness in internal control.

Finance and Enterprise Systems should work together to investigate and resolve the reconciling amounts and maintain appropriate documentation for all payments and amounts drawn down from the federal government. Finance should implement controls over the SNAP daily reconciliation to ensure data is accurate, discrepancies are resolved timely, documentation of supervisor’s review and approval, and supporting documentation is maintained.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-005: Dedicate Resources to Timely Update of CAPP Manual Topics

Applicable to: Department of Accounts

Prior Year Finding Number: N/A
Type of Finding: Internal Control
Severity of Deficiency: Significant Deficiency

Accounts’ management is not performing timely updates to the Commonwealth Accounting Policies and Procedures (CAPP) Manual for agencies and institutions of the Commonwealth. While performing our test work, we identified ten CAPP Manual topics that were outdated and still referenced the Commonwealth’s former accounting system. Accounts decommissioned the previous accounting system in July 2016. The outdated sections cover a variety of areas including payroll and the processing of revenue refunds and loans to the Commonwealth.
Section 2.2-803 of the Code of Virginia requires Accounts to provide authoritative guidance on the application of accounting policies, procedures, and systems. Further, having up to date and relevant policies and procedures is a key component of internal control and ensures consistent processing of transactions throughout the Commonwealth. Accounts not updating CAPP Manual topics on a timely basis could have a negative impact on consistent transactional processing and financial reporting throughout the Commonwealth. In addition, the lack of up to date guidance could contribute to a breakdown in internal controls at the agency and institution level. According to Accounts’ management, the delay in performing the updates is primarily due to a lack of available resources. Accounts’ current plan is to update general accounting topics by December 31, 2019. Accounts Payroll Operations does not have a definitive date for updating payroll related topics in the CAPP Manual. Accounts extended the timeline for having payroll topics updated due to management dedicating additional payroll resources to the Commonwealth’s Human Capital Management project. To compensate for having outdated payroll guidance in the CAPP manual, Payroll Operations is currently using an email listserv of agency/institution payroll contacts to communicate changes and updates to specific policies and procedures.

Accounts should dedicate the necessary resources to update all outdated CAPP Manual topics. Further, while Accounts has established a set time for updating outdated general accounting topics, Accounts should also strive to set a deadline for having payroll topics updated. Though Accounts is currently using an email listserv to communicate changes to payroll policies and procedures, this is not a sufficient substitute for having updated and relevant authoritative guidance to which agency personnel can be held accountable.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-006: Improve Controls Over Financial Systems Reconciliations

Applicable to: Department of Behavioral Health and Developmental Services

Prior Year Finding Number: N/A
Type of Finding: Internal Control
Severity of Deficiency: Significant Deficiency

Individual facilities within the DBHDS and the Central Office do not have adequate controls in place to ensure reconciliations between DBHDS and the Commonwealth’s financial systems include a review of necessary reports, are performed timely and at the appropriate level, are materially correct, are signed by the preparer, and are properly reviewed. During our review, we found the following:

- Two of four facilities tested (50%) and the Central Office do not have adequate internal policies and procedures over the fixed assets reconciliation.
• One of four facilities tested (25%) did not have evidence of a proper reconciliation of appropriations and allotments.

• The Central Office did not have evidence of a proper reconciliation of capital appropriations and allotments.

• One of four facilities tested (25%) used the increase/decrease amount for an account rather than the proper month end balance on the fixed assets reconciliation.

• The Central Office does not review reports from the Commonwealth’s fixed assets system during the reconciliation of fixed assets to ensure system totals agree.

• One of four facilities tested (25%) and the Central Office did not perform reconciliations at the appropriate level, specifically for expenses (fund, program, account level) and capital project expenditures (fund, project, and account level), respectively.

• One of four facilities tested (25%) and the Central Office did not have evidence of preparer signature and date for the monthly reconciliation, including the reconciliation of fixed assets.

• One of four facilities tested (25%) did not have evidence of a timely review by approver of the fixed assets reconciliation. In addition, the Central Office did not perform a proper review of a reconciliation.

CAPP Manual Topic 20905 prescribes the level of detail at which agency records, accounts, and logs must be reconciled depending on the nature of the transactions and requires documentation to be made available for inspection by outside parties. In addition, CAPP Manual Topic 30905 requires that the agency reconcile all agency source records to reports from the Commonwealth’s fixed assets system. Finally, by submitting the Certification of Agency Reconciliations to Accounts, the agency is certifying that its internal records are in agreement with those reported in the state-wide financial system and that appropriations, allotments, expenses, capital project expenses, revenues, cash, fixed assets, and all other accounts have been reconciled at the appropriate level. This certification is required to be submitted by the last business day of the month following period close or as stated otherwise by the Comptroller.

The improper reconciliation of systems to the Commonwealth’s accounting and financial reporting system increases the risk of material misstatement of overall account balances. These misstatements can ultimately affect funding for DBHDS services and the amounts DBHDS reports for the Commonwealth’s Comprehensive Annual Financial Report (CAFR).

DBHDS facilities and the Central Office provided several reasons for the issues noted above. Facilities acknowledged that the exceptions occurred due to oversight error, unawareness of specific reconciliation requirements, and the fact that they did not retain documentation. We noted that the Central Office monthly reconciliations lack oversight and review by management. In addition, the Central Office’s Budget Department maintains responsibilities over fixed assets. However, we found that
the Fiscal Accounting Department lacks collaboration with the Budget Department during the fixed assets reconciliation.

Fiscal departments should reinforce policies and procedures over system reconciliations for DBHDS facilities and the Central Office. Management should communicate CAPP Manual requirements reflected in policies and procedures to personnel and ensure that the requirements are adhered to when completing reconciliations. DBHDS should ensure that the appropriate preparer and reviewer sign each reconciliation and that a proper review is performed. Facilities and the Central Office should reconcile at the correct level and use proper ending balances for the monthly reconciliation. The Central Office Fiscal Accounting and Budget Departments should collaborate during the reconciliation of fixed assets. Finally, DBHDS facilities and the Central Office should submit monthly certifications to Accounts only after they complete all reconciliation requirements.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.


Applicable to: Department of Behavioral Health and Developmental Services

Prior Year Finding Number: N/A
Type of Finding: Internal Control
Severity of Deficiency: Significant Deficiency

One facility within DBHDS is not processing expense reimbursements in the Commonwealth’s accounting and financial reporting system. Currently, the Fiscal Department (Fiscal) at the facility is processing expense reimbursements with a local petty cash account. Although the facility approves travel expenses prior to an employee’s travel, the facility is not processing transactions as required in the Commonwealth’s accounting and financial reporting system. As a result, the facility issued numerous travel advances to employees during the fiscal year using petty cash funds, amounting to $43,647.

CAPP Manual Topic 20335 requires state employees to be reimbursed for travel related expenses using the Travel and Expenses module of the Commonwealth’s accounting and financial reporting system. Petty cash may not be used for travel advances to state employees. In addition, CAPP Manual Topic 20336 requires the processing of cash advances in the system. Processing of transactions in the Commonwealth’s accounting and financial reporting system is important for ensuring transparency and proper accounting of transactions. The facility is at elevated level of risk for fraud, waste, abuse, and non-compliance if accounts are set up outside of the Commonwealth’s accounting and financial reporting system. Finally, CAPP Manual Topic 20360 requires employees who travel overnight more
than two times per year to be issued a travel charge card in order to reduce the need for travel cash advances.

Due to turnover at the facility, Fiscal staff did not maintain documentation of permission given by Accounts authorizing the use of a local account for reimbursements. Therefore, Fiscal staff were unable to provide documentation of approval to use the account for expense reimbursements. Additionally, staff were unaware of the CAPP Manual requirements for expense reimbursements and cash advances. Fiscal should process expense reimbursements in the Commonwealth’s accounting and financial reporting system in accordance with applicable guidance. Fiscal management should ensure that staff understand the requirements associated with employee reimbursements and cash advances. Furthermore, employees that travel regularly during the year should be issued a travel charge card as required by the CAPP Manual.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-008: Perform an Evaluation and Analysis of Potential Asset Retirement and Pollution Remediation Obligations

Applicable to: Department of Behavioral Health and Developmental Services

Prior Year Finding Number: N/A
Type of Finding: Internal Control
Severity of Deficiency: Significant Deficiency

DBHDS did not perform a proper evaluation and analysis of potential asset retirement and pollution remediation obligations. Finance and Administration did not properly evaluate the applicability of Governmental Accounting Standards Board (GASB) Statement No. 83, Certain Asset Retirement Obligations, which became effective for reporting periods after June 15, 2018, and is applicable to fiscal year 2019. In addition, Finance and Administration did not perform any further consideration of GASB Statement No. 49, Accounting and Financial Reporting for Pollution Remediation Obligations.

Accounts performed a statewide survey for completion by all Commonwealth agencies to determine the applicability of this standard to the Commonwealth’s financial statements. Based on the survey responses, all DBHDS facilities responded that they do not have any potential asset retirement obligations as defined by GASB Statement No. 83. We followed up on their responses and determined that DBHDS may have potential asset retirement obligations or pollution remediation obligations. We found, at a minimum, ten assets that should be further evaluated as a retirement obligation or remediation obligation. Further inquiry indicated that these identified assets did not meet the criteria of GASB 83.
Finance and Administration did not perform any verification of the individual facilities responses to the survey. Instead of performing their proper due diligence, Finance and Administration followed up with the Office of Architectural and Engineering at the Central Office as a reasonableness check of the facilities responses. Due to a lack of communication with the individual facilities, Finance and Administration was unaware of potential pollution remediation obligations and asset retirement obligations. Not contacting the facilities with direct knowledge of their assets risk incorrect responses to Account’s survey. Further, not properly identifying potential asset retirement obligations or pollution retirement obligations could result in a misstatement of the Commonwealth’s financial statements.

Finance and Administration should evaluate and analyze the impact applicable GASB standards have on the Commonwealth and DBHDS. This evaluation should take into consideration any applicable external laws, regulations, contracts, or court judgements that DBHDS abides by that may trigger potential asset retirement obligations. Additionally, DBHDS should determine whether an obligating event has occurred that would cause recognition of pollution remediation obligations. Finance and Administration should coordinate with the proper personnel at the individual facilities to ensure adequate and accurate identification and accounting of potential asset retirement obligations and pollution remediation obligations.

Views of Responsible Officials:

*Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.*


Applicable to: Department of Behavioral Health and Developmental Services

Prior Year Finding Number: N/A
Type of Finding: Internal Control
Severity of Deficiency: Significant Deficiency

DBHDS needs to strengthen its controls over the review and reporting of the year-end agency leave liability submission to Accounts. The Office of Budget Execution and Financial Reporting (Budget Execution) at the Central Office receives and compiles individual facility leave liability submissions, which include leave liability and the detailed calculations behind it. Budget Execution performs a compilation of this support in order to report the total leave liability for DBHDS on the Leave Liability Attachment to Accounts for inclusion in the Commonwealth’s financial statements. Budget Execution does not perform an adequate review of these submissions to ensure that the total current and noncurrent leave liability reported is accurate. In addition, each of the four facilities reviewed in detail has their own unique process of calculating and reviewing leave liability. The following errors were noted on the leave liability submission, the supporting documentation, and facility review processes:
• Budget Execution reported $2,357,321 of leave liability in the incorrect fund on the Leave Liability Attachment.

• Budget Execution reported $38,202 of leave liability in the incorrect program in support used for preparation of the Leave Liability Attachment.

• One facility did not use the correct social security base to determine taxes on leave liability.

• One facility reported $800,877 of leave liability in the incorrect program on the facility’s leave liability submission to Budget Execution.

• One facility performed an inadequate review of leave liability prior to submitting information to Budget Execution and does not have a formal review process in place at the facility.

The Comptroller’s Directive No. 1-19 establishes compliance guidelines and addresses financial reporting requirements for state agencies to provide information to Accounts for the preparation of the CAFR as required by the Code of Virginia. The Comptroller’s Directive also states that by submitting the attachment to Accounts, the agency is certifying that the attachment has been reviewed and is accurate. This guidance also provides assistance to those who prepare and review financial reporting attachments and supplemental information sent to Accounts for presentation in the CAFR.

These errors occurred for multiple reasons. Budget Execution reported amounts in the incorrect fund on the Leave Liability Attachment due to human error not detected by the review process. Individual facilities are under the impression that Budget Execution performs a detailed review of facility leave liability submissions. However, Budget Execution assumes that an adequate review is performed at the facility level. Furthermore, due to turnover, one facility does not have a formal process in place for reviewing leave liability for accuracy once calculated by the preparer. Without an adequate review process, there is a higher risk of misstatement of current and noncurrent leave liability reported as part of the CAFR. This risk is elevated due to the fact that there is potential for inadequate reviews to occur at both the facility and Budget Execution level.

Budget Execution certifies the leave liability submission and; therefore, should enhance its review of individual facility submissions for accuracy prior to preparing its Leave Liability Attachment submission. Budget Execution should communicate with facility staff responsible for preparing the individual facility leave liability submissions throughout the financial reporting process to ensure all staff are aware of the correct reporting process, use the proper criteria for leave reports, and include all necessary leave balances for the calculation of leave liability.
Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-010: Improve Financial Reporting of Infrastructure Assets

Applicable to: Department of Transportation

Prior Year Finding Number: N/A
Type of Finding: Internal Control
Severity of Deficiency: Significant Deficiency

During fiscal year 2019, Fiscal designed, documented, and implemented detailed procedures over its infrastructure capitalization process as recommended in the prior year report. However, because the process is manual, it is difficult for Fiscal to implement controls and procedures that can adequately reduce the risk of errors. Fiscal uses a completely manual process to distinguish between capitalizable and non-capitalizable projects. Fiscal does not use control totals or any other analysis to ensure the accuracy and completeness of the capitalizable amounts reported. Fiscal did not detect changes in reporting categories of projects between fiscal years and did not identify instances where projects had two conflicting reporting categories, leading to two different accounting treatments. Additionally, in cases where Fiscal changed a project’s reporting category due to subsequent review, Fiscal did not always adjust prior construction-in-progress and infrastructure asset amounts. In fiscal year 2019, Fiscal overstated net capital assets by a net $7.6 million, which is the combination of an overstatement of $14.8 million and an understatement of $7.2 million. The process for reporting infrastructure assets has become so complex that making a mistake in one data field on one project in the Commonwealth’s accounting and reporting system is a significant risk and could potentially result in a material misstatement.

When the Commonwealth implemented Governmental Accounting Standards Board (GASB) Statement No. 34 in 2002, Transportation decided that the most efficient way to capitalize roadway infrastructure was to use programmatic funding because construction and maintenance programs were separate. This created a simple process for identifying infrastructure expenses for capitalization. Over the years, Transportation’s programmatic funding gradually changed, leading to a blurred line between maintenance and capitalizable construction projects. Starting in fiscal year 2017, the General Assembly significantly changed Transportation’s programmatic funding streams and their purposes, resulting in further complexities, as programs could have capitalizable maintenance projects, capitalizable construction projects, and non-capitalizable projects in the same program. To adapt to the new programmatic coding, Fiscal began using manually assigned reporting categories to label each project for inclusion or exclusion from infrastructure. Because the process is manual and projects range in value, Fiscal cannot implement processes and controls that can adequately reduce the risk of errors and omissions.
The State Comptroller's annual Directive requires Transportation to report capital assets including infrastructure for inclusion in the Commonwealth’s CAFR. The Commonwealth Accounting Policies and Procedures Manual (CAPP Manual) Topic 30210 requires agencies to implement internal control procedures to ensure that all assets are recorded at their proper value and that all assets are periodically reviewed to avoid material overstatement.

Since legislative and operational changes that occurred since implementation have complicated the infrastructure capitalization process, Fiscal should re-evaluate their financial reporting methodology for infrastructure assets. Fiscal should consider best practices and methods that other state governments use to capitalize highway infrastructure. Fiscal should seek ways to automate the financial reporting of infrastructure assets to eliminate reliance on manual processes and reduce errors.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-011: Improve Financial Reporting Classification within Net Position

Applicable to: Department of Transportation

Prior Year Finding Number: N/A
Type of Finding: Internal Control
Severity of Deficiency: Significant Deficiency

Fiscal does not consider how refinanced debt for non-Commonwealth capital assets should be classified when developing the Net Position section of the CAFR’s Statement of Net Position. While the new debt is properly classified within the Liabilities and Deferred Outflow of Resources section, Transportation does not consider which assets (Commonwealth or non-Commonwealth) were acquired with the original debt to determine how the new debt should impact the items reported within the Net Position section.

As addressed in the GASB Comprehensive Implementation Guide, Section 7.23.6, if debt is issued to refund existing capital-related debt, “the replacement debt assumes the capital characteristics of the original issue.” Further, Section 7.23.3 of the GASB Comprehensive Implementation Guide states that “premiums, discounts, and deferred outflows of resources or deferred inflows of resources from refundings ‘follow the debt’ in calculating the components of net position... if the debt proceeds are not restricted for capital or other purposes, [these components] would be included in the calculation of unrestricted net position.” Bond-funded expenses that are not capitalized should not be included in the calculation of Net Investment of Capital Assets; examples include impaired, transferred, and disposed capital assets.
While there is zero impact to the total net position of the Commonwealth, incorrectly including the new debt related to non-Commonwealth capital assets within the calculation for Net Investment in Capital Assets makes it appear that a larger portion of the debt of the Commonwealth is being used to acquire capital assets that will remain property of the Commonwealth. Conversely, an equal amount of new debt related to the original debt used to generate non-Commonwealth capital assets is being excluded from unrestricted net position.

According to Transportation’s management, in September 2016, Transportation and Accounts personnel met to discuss Transportation’s calculation of Net Investment in Capital Assets reported within its annual submissions in support of the Commonwealth’s financial statements. However, during this meeting and in further communications between the agencies, dialogue regarding the effect of debt refinancing did not occur. Transportation’s management indicated that, based on these discussions and initial review of the proposed submission by Accounts, Transportation assumed that refinanced debt should be considered as proceeds used for Commonwealth capital assets, as the refinancing proceeds were used to pay off a debt of the Commonwealth. Transportation was not aware of this requirement set by GASB and, as a result, Transportation’s written policies and procedures did not address the classification of refinanced debt for non-Commonwealth capital assets in the Statement of Net Position.

Fiscal should improve internal policies and procedures to ensure that classifications within the Net Position section of the Statement of Net Position are accurate, reasonable, and properly apply applicable accounting standards. Management should proactively assess these procedures annually to ensure that items being reported are being properly captured. Staff within Fiscal should consider attending trainings that focus on GASB requirements.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-012: **Improve Policies and Procedures over Unclaimed Property Reconciliations**

**Applicable to:** Department of the Treasury

**Prior Year Finding Number:** N/A  
**Type of Finding:** Internal Control  
**Severity of Deficiency:** Significant Deficiency

Unclaimed Property does not have sufficient policies and procedures over the process of reconciling its unclaimed property system to the Commonwealth’s accounting and financial reporting system. The policy does not include requirements for timeliness of preparation and review. In addition, there is not sufficient detail of the actual reconciliation process, nor explanations of how each system’s information is used and how to document the reconciling items. As a result, we found the following issues with the reconciliations reviewed for fiscal year 2019:
Two of four (50%) of the reconciliations selected for review were not dated, so a determination of timeliness of preparation or review could not be made, and one reconciliation out of four (25%) was completed five business days late.

Three of four (75%) of the reconciliations reviewed did not have a clear audit trail for reconciling items.

CAPP Manual Topic 20905, – Cardinal Reconciliation Requirements, requires all internally prepared accounting records, data submission logs, and other accounting data to be reconciled to reports produced by the Commonwealth’s accounting and financial reporting system by the last business day of the month following the period close. In addition, Topic 20905 prescribes the level of detail at which agency records, accounts, and logs must be reconciled depending on the nature of the transactions. If recorded in multiple systems, transactions should be traced from one system to another, any variance between accounting data should be traced to specific transactions, and all variances should be explained and justified. Additionally, documentation should be maintained that enables accountants to follow an “audit trail” through the accounting process from each transaction to appropriate reports and other output. Policies and procedures should be complete and up to date; customized to reflect agency staffing, organization, and operating procedures.

Reconciliations are a key internal control for ensuring financial activity recorded in multiple systems is accurate in each of those systems and for preventing improper payments. In addition, the improper reconciliation of systems increases the risk of material misstatement for account balances related to Unclaimed Property activity. Inadequately detailed policies and procedures over the reconciliation process coupled with the retirement of the Unclaimed Property accountant contributed to the issues we noted with the reconciliations reviewed during fiscal year 2019.

Unclaimed Property should improve its existing policies and procedures over the reconciliation between the unclaimed property system and the Commonwealth’s accounting and reporting system to ensure they are sufficiently detailed to reflect the unique operations of the division. Further, management should ensure that staff are adequately supporting reconciling items and maintaining sufficient documentation for the reconciliations. Finally, the reconciliations should be signed and dated by the preparer and reviewer; and reviewed timely in accordance with the CAPP Manual.

**Views of Responsible Officials:**

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.
2019-013: Improve the Expense Allocation Process

Applicable to: Department of Health

Prior Year Finding Number: N/A
Type of Finding: Internal Control
Severity of Deficiency: Significant Deficiency

Health did not properly allocate expenses among three different funds resulting in a misstatement of expenses at the end of the year. Health initially pays expenses from the general fund and later allocates the expenses among various special revenue funds based on the revenues received. At fiscal year-end, Health usually performs an analysis and makes a final “true-up” entry, but Health did not perform this analysis or make the final “true-up” entry at the end of fiscal year 2019.

CAPP Manual Topic 60104 defines the general fund as the fund which accounts for the ordinary operations of government and states that “all activities that do not qualify for inclusion in any other fund should be included in the general fund.” The same section of the CAPP Manual states that a special revenue fund “accounts for activities, which are supported from revenues, derived from restricted taxes and other special revenue sources.” Therefore, it is critical to properly match the expenses to the appropriate funding sources.

As a result of not properly allocating expenses, Health misclassified a total of $2,137,432 in expenses among three funds. At the end of fiscal year 2019, Health understated expenses in the Local Health District Match Fund by $2,137,432, overstated expenses in the Local Health District Service Fee Fund by $1,383,782, and overstated general fund expenses by $753,650. In addition, this error affected Health’s year end leave liability submission to Accounts as Health uses these same percentages to allocate its leave liability. The leave liability information contained a misclassification between the same three funds totaling $108,479.

These errors were due to turnover in a key position within the General Accounting Department. The person responsible for evaluating whether the year-end “true-up” entry was necessary vacated her position prior to completing this task, and there was no backup person assigned. Additionally, there are no procedures in place outlining these key responsibilities.

Health should work with Accounts to determine if this misclassification requires an adjustment to its accounting records in fiscal year 2020. Additionally, Health should document all business-critical tasks in the General Accounting Department so that other people can perform these functions in the absence of the primary person. Finally, Health should designate a backup person to perform each of these tasks in cases where the primary person is unavailable. This will reduce the risk of missing key journal entries and ensure the correct allocation of expenses at year-end.
Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

ACCESS CONTROL

2019-014: Develop and Implement Compliant Application Access Management Procedures

Applicable to: Department of Behavioral Health and Developmental Services

Prior Year Finding Number: 2018-039
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

All of the facilities within DBHDS do not have access management procedures, which meet the baseline standard defined by the Security Standard. The Information Security Office issued baseline procedures and implemented an application to approve access requests for all DBHDS facilities. However, the facilities have not developed procedures they can adapt for their specific environment that will ensure compliance with the Security Standard.

Security Standard, Section AC-1, requires an organization to develop, document, and disseminate an access control policy that addresses purpose, scope, roles, responsibilities, management commitment, and compliance. The access control policy should include procedures to facilitate the implementation of the policy and associated access controls. Security Standard, Section AC-2, addresses requirements over account management practices for requesting, granting, administering, and terminating accounts. Not having adequate access control policies and procedures increases the risk that individuals will have inappropriate access and can potentially process unauthorized transactions.

The DBHDS Information Security Office sent the baseline security procedures to all DBHDS facilities with the expectation that they would bring their internal procedures in line with the baseline procedures by March 2018. However, the Information Security Office did not monitor the facilities’ implementation of these procedures because each facility has unique processes related to access. The Information Security Office should work with the individual facilities to set reasonable deadlines and monitor their actions to ensure that they bring their application access management procedures in line with the office’s baseline procedures and the Security Standard.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

Applicable to: Department of Behavioral Health and Developmental Services

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

DBHDS did not timely request that Accounts remove seven out of 20 (35%) Commonwealth’s accounting and financial reporting system users access for individuals who no longer required access. Access removal requests for these users took between six to 64 days. Although DBHDS did have policies and procedures that included processes for removing access to the Commonwealth’s accounting and financial reporting system, these procedures did not speak to the access removal timeframe.

The Security Standard, Section AC-2-COV 2f, requires the prompt removal of access when no longer needed. Per Commonwealth Accounting Policies and Procedures (CAPP) Manual Topic 70220, security officers are responsible for submitting timely security deletion requests for staff who no longer require access. CAPP Manual Topic 70220 states that agencies should have policies and procedures that include processes for removing access timely for employees that have left the agency. Furthermore, DBHDS should ensure that these procedures are in compliance with the Security Standard.

Due to ineffective access controls, DBHDS did not ensure that individuals were removed timely from the Commonwealth’s accounting and financial reporting system. Instead of promptly removing access upon termination, transfer, or layoff, security officers waited until the annual review of access to request the removal of employee’s access. Delaying the removal of all access privileges increases the risk that former employees will have unauthorized access to Commonwealth systems and sensitive information.

Security officers should promptly remove access upon termination, transfer, or under other circumstances in accordance with the Security Standard. Security officers should submit timely security deletion requests to Accounts instead of waiting until annual access reviews to remove access. Additionally, DBHDS should strengthen internal policies and procedures over access to the Commonwealth’s accounting and financial reporting system to ensure compliance with the Security Standard.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.
2019-016: Develop Access Profile Descriptions and Improve Monitoring Controls over the Internal Attendance and Leave System

Applicable to: Department of Behavioral Health and Developmental Services

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

DBHDS does not have descriptions of access profile capabilities for the internal time, attendance, and leave system. Since each DBHDS facility has the option to request access profiles based on the facility’s need, there are varying profiles across all facilities and the Central Office. Additionally, documentation of access monitoring was not in compliance with internal monitoring requirements, which requires a complete review of all user access to be performed annually. We completed a review of monitoring certifications and submissions for all 14 DBHDS facilities and the Central Office. Four facilities (27%) did not include evidence that all access types were reviewed for reasonableness on their monitoring spreadsheets. Two of these facilities only documented the monitoring of users with elevated access privileges and users with unreasonable access that required a change. The other two facilities only documented unreasonable access.

The Security Standard, Section 8.1 AC-1, requires agencies to develop, document, disseminate, and review and update annually, an access control policy that addresses purpose, scope, roles, compliance, and responsibilities and formal documented procedures to facilitate the implementation of the policy and associated access controls. Additionally, Section 8.1 AC-2 of the Security Standard states “the organization reviews accounts for compliance with account management requirements on an annual basis or more frequently if required to address an environmental change.”

Access descriptions are important to properly assign profiles to new users and help to ensure least privilege. Written documentation reduces the impact that turnover has on institutional knowledge and makes information more readily available. The lack of proper monitoring of all users can result in inappropriate access such as access for terminated employees. In addition, inadequate system documentation may cause inefficiencies in the process of granting access as well as monitoring of access.

DBHDS has not developed access profile descriptions due to the lack of staff and resources. Inadequate documentation of access monitoring occurred due to the new monitoring process implemented during fiscal year 2019 which requires the review of all users as opposed to only those with elevated access privileges. The facilities that did not comply with the new internal monitoring requirements were still following the historical monitoring process.

DBHDS should develop access capability descriptions for access profiles for the internal time, attendance, and leave system. In addition, all DBHDS facilities and the Central Office should perform and document a complete review of all users at least annually. The Central Office should review all facility submissions to ensure completeness of access reviews.
Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

FISCAL YEAR 2019

2019-017: Improve Access Controls over the Commonwealth’s Payroll System

Applicable to: Department of Behavioral Health and Developmental Services

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

Individual facilities within the DBHDS and the Central Office are not consistently removing system access to the Commonwealth’s payroll system for terminated or transferred employees in a timely manner. For three out of eight (38%) Commonwealth’s payroll system users tested, payroll security officers at the individual facilities and the Central Office did not terminate employee access up until two to 76 days after their last day worked.

The Security Standard, Section PS-4, states an organization must disable information system access within 24 hours of employee separation and terminate any authenticators or credentials associated with the individual. Untimely termination of access from the Commonwealth’s payroll system greatly increases the risk of unauthorized payroll transactions.

There are two underlying causes for why access to the Commonwealth’s payroll system was not timely removed. Payroll security officers at the individual facilities and the Central Office thought that it was reasonable to remove access within two days and; therefore, they did not comply with the access removal timeframe stipulated in the Security Standard. Additionally, access was not promptly removed upon layoff because a payroll security officer waited until the semi-annual review of access to request the removal of employee’s access.

Payroll security officers at the individual facilities and the Central Office should ensure that access to the Commonwealth’s payroll system is promptly removed upon termination, transfer, or under other circumstances in accordance with the Security Standard. Further, staff should submit timely requests to delete access, instead of waiting until semi-annual access reviews to remove access. Payroll security officers should ensure compliance with access removal timeframes as outlined in the Security Standard.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.
2019-018: **Improve Controls Over Access to the Commonwealth’s Retirement Benefits System**

**Applicable to:** Department of Behavioral Health and Developmental Services

**Prior Year Finding Number:** 2018-083; 2017-077; 2016-068; 2015-081; 2014-063  
**Type of Finding:** Internal Control and Compliance  
**Severity of Deficiency:** Significant Deficiency

Individual facilities within the DBHDS and the Central Office do not have adequate controls in place to ensure that system access to the Commonwealth’s retirement benefits system is appropriate. Human Resources at the facilities and the Central Office did not terminate system access timely to the Commonwealth’s retirement benefits system for six out of 11 (54%) inactive users. Access removal for these users ranged between three days to 72 days post separation. One out of three active Commonwealth’s retirement benefits system users tested (33%) at the Central Office had system access privileges that were neither appropriate nor based on least privilege according to job responsibilities.

The Security Standard, Section PS-4, states an organization must disable information system access within 24 hours of employee separation and terminate any authenticators or credentials associated with the individual. Delays in deleting access increases the risk of unauthorized use of the Commonwealth’s retirement benefits system which could result in unauthorized changes and could impair data integrity.

Furthermore, Security Standard, Section AC-6, requires granting access based on the principle of least privilege and only authorizing user access which is necessary to accomplish tasks in accordance with organizational missions and business functions. Granting access based on the principle of least privilege is a best practice for maintaining security over critical systems. When access granted violates the principle of least privilege, there is an increased risk that users can circumvent other compensating controls and perform unauthorized transactions.

According to management at the individual facilities and the Central Office, timely removal of user access to the Commonwealth’s retirement benefits system did not occur due to delayed communication within Human Resources. Further, Human Resources did not have a documented procedure for removing terminated employee access to the Commonwealth’s retirement benefits system. For the user that had inappropriate access at the Central Office, Human Resources did not appropriately consider the principle of least privilege when establishing access.

Human Resources Management should ensure that access to the Commonwealth’s retirement benefit system is appropriate. Human Resources at the individual facilities and the Central Office should ensure there are proper procedures in place to remove unneeded access to the Commonwealth’s retirement benefits system timely. Human Resources at the Central Office should reassign access to the Commonwealth’s retirement benefits system based on a least privilege basis as defined in the Security Standard.
Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.


Applicable to: Department of Health

Prior Year Finding Number: 2018-036; 2017-024; 2016-020; 2015-026; 2014-038
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

Department supervisors did not notify the Office of Human Resources (Human Resources) in a timely manner as they became aware of employee separations, which resulted in delays of system access removal. Additionally, in some cases, the supervisors and Human Resources did not realize that the terminated employees had active accounts to certain information systems, causing delays in deleting the accounts. During our review, we found delays in the removal of access from the following information systems:

- Health removed access to the Commonwealth’s human resources system for 105 users during the fiscal year, but did not remove access timely for three of these users. These accounts were removed 16 to 211 days after the employees’ separation dates.

- Health removed access to the Commonwealth’s payroll system for 37 users during the fiscal year, but access was not removed timely for four users. These accounts were removed 13 to 166 days after the employees’ separation dates.

- Health removed access to the patient management system for 376 users during the fiscal year, but access was not removed timely for 24 users. These accounts were removed seven to 144 days after the employees’ separation dates.

- Health removed access to the Commonwealth’s accounting and financial reporting system for 32 users during the fiscal year, but access was not removed timely for one user. This account was removed four business days after the employee’s separation date.

Section PS-4 of the Security Standard requires agencies to “disable information system access within 24 hours of employment termination.” Additionally, Health’s internal off-boarding procedure requires supervisors to inform Human Resources of an employee separation as soon as the supervisor is aware of the separation. Health’s procedure then requires deletion of the account within 24 hours of notification.
Terminated employees who still have access to critical systems may be able to access these systems after leaving the agency. By not deleting users’ accounts to sensitive information systems timely, this also increases the risk of an internal or external party compromising these unneeded accounts and using them to access these systems. Each of these scenarios increases the risk of inappropriate transactions and the exposure of sensitive data.

Health implemented a new process to off-board employees during the fiscal year to increase efficiency; however, there were still delays in removing system access in both the old and new processes. In some cases, department supervisors and district Human Resources staff did not complete their parts of the off-boarding process in a timely manner. In other cases, Health did not identify the fact that the terminated employees had access to these systems in order to remove the access. Additionally, Health’s off-boarding process does not include a review of the off-boarding procedures to ensure each responsible party completed their tasks. Therefore, Health was not able to identify the fact that they needed to remove these users’ access in a timely manner.

Health should strengthen their new process by implementing a review of all off-boarding tasks and clarify the timeline for each task. This will ensure completion of each task and will identify instances of delay. Health should also review system access listings with each employee termination to identify the systems the employees can access. This will reduce rates of non-compliance with both the statewide and internal policies by removing the access within 24 hours. This will also reduce the risk of unauthorized transactions and exposure of sensitive data. Health may also want to review their current policy to ensure it is in compliance with the Security Standard. Any policy exceptions to the Security Standard need to be approved by VITA.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.
2019-020: Perform System Access Reviews

Applicable to: Department of Health

Prior Year Finding Number: 2018-037
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency
CFDA Title and CFDA #: HIV Care Formula Grants - 93.917
Federal Award Number and Year: X07HA00009 - 2018
Name of Federal Agency: U.S. Department of Health and Human Services
Type of Compliance Requirement - Criteria: Other - 2 C.F.R. § 200.303(e)
Known Questioned Costs: $0

Health did not perform comprehensive system access reviews within timeframes established by internal and statewide procedures. Health has multiple critical systems throughout several different departments. These systems support various business functions, including accounting, patient management and benefits administration, so there are various internal policies that address periodic system access reviews. During our review of Health’s system access reviews, we identified the following instances of non-compliance with policies and procedures:

- Department supervisors did not submit three out of ten (30%) monthly access review certifications by the due date for the internal financial and accounting system; receipt of these certifications occurred 24 to 66 days past the due dates.

- Department supervisors did not submit three out of ten (30%) monthly access review certifications by the due date for the patient management system; receipt of these certifications occurred between seven to 16 days past the due dates.

- Human Resources has not performed a comprehensive annual review of access privileges for the Commonwealth’s retirement benefits system since April of 2017.

- After implementing monthly access reviews for the Women, Infants, and Children (WIC) eligibility system in April 2019, 12 of 35 department supervisors did not submit at least one of their monthly access review certifications over the three-month period between April and June 2019. Two of these supervisors did not submit the certification for any of the three months. In addition, central office staff did not maintain any certifications or other evidence of a comprehensive access review for the same system throughout the entire fiscal year.

- Administrative staff did not perform two quarterly access reviews for the HIV formula grant system as required by Health’s internal access review policy.
• Health has no formal process in place for reviewing access to the WIC electronic benefit system. Although a third party manages this system, Health employees have read-only access to information in the system but do not have a process to manage this access.

Health’s internal policies require supervisors of Health’s various business areas to review and certify access to Health’s accounting, patient management, and WIC benefits systems monthly. For the patient management and accounting systems, the policy requires these supervisors to perform these monthly reviews by the tenth day of the following month. Health’s internal policy on reviewing access to the HIV formula grant benefits system requires a quarterly review. Additionally, for sensitive information systems, Section AC-6-7a of the Security Standard requires agencies to “review on an annual basis the privileges assigned to all users to validate the need for such privileges.”

Regular access reviews ensure that system administrators processed all requests to add, modify or delete users properly and in accordance with requests from the system owners. Not performing regular access reviews increases the risk of individuals having inappropriate access to information systems.

Staffing changes caused some of the delays in performing and certifying access reviews of the patient management and accounting systems. In some situations, the reviewer did not get the correct level of access to both review and certify system access in time to meet the deadlines. Resource constraints and the prioritization of other tasks led to the remaining delays in the patient management and accounting systems reviews as well as the retirement benefits system and WIC eligibility system reviews. Staffing changes were also the cause for the lack of reviews for the HIV formula grant benefits system.

Health should ensure backup personnel are available to perform regular reviews of access in the event that the primary reviewer is unable to perform the review. Additionally, Health should perform follow-up procedures when reviewers do not provide certifications within their established timeframes to ensure the prioritization of these reviews. This will reduce the rates of untimely reviews and decrease the risk of inappropriate access to sensitive information systems.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.
2019-021: Improve Segregation of Duties Controls over the Payroll and Human Resources System

Applicable to: University of Virginia

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

The University implemented a new payroll and human resources system (System) in fiscal year 2019, and unintentionally assigned employees conflicting roles creating segregation of duties risks. The University hired a consultant with proprietary access analysis tools to perform a segregation of duties analysis over the new System and provide a detailed report identifying potential concerns. The University began to research and address concerns in August 2019 and will continue to address additional concerns during the remainder of fiscal year 2020.

As outlined in the University’s policy FIN-021: Internal Control, individuals responsible for administering University funds and resources must grant or delegate financial authority carefully, with consideration for proper segregation of duties. The University’s adopted information security standard, ISO 27002, section 9.2.2, states, “the provisioning process for assigning or revoking access rights granted to user IDs should include verifying that the level of access granted is appropriate to the access policies and is consistent with other requirements such as segregation of duties.” Inadequate segregation of duties increases the risk for fraudulent transactions and errors in financial reporting and heightens reliance on compensating detective controls. The improper segregation of duties occurred as a result of the University not identifying business processes and prioritizing potential conflicts prior to System implementation. The University should develop a resource that details conflicting business processes and their respective roles for use in establishing and monitoring future access to the system and resolve remaining segregation of duties conflicts identified in the consultant’s report.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.


Applicable to: University of Virginia

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

University HR did not terminate employees’ access to the benefits system timely upon termination of employment. During fiscal year 2019, six individuals with access to the benefits system
separated from the University. For three individuals, HR did not remove system access for more than 30 days after each employee’s last day of employment.

The University’s policy IRM-003: Data Protection of University Information, classifies personal information that if exposed can lead to identity theft, as highly sensitive data. The University Use of Highly Sensitive Data Standard reads that access, generation, collection, storage, and transmission of highly sensitive data will only be allowed when essential and approved for business processes. Additionally, the University’s adopted information security standard, ISO 27002, sections 9.2.1 and 9.2.2, state the University should immediately disable or remove access rights of users who have left the institution. Not removing system access in a timely manner increases the risk of unauthorized access to highly sensitive data by individuals no longer employed by the University.

Currently, on a bi-weekly basis, the HR Benefits department uploads a batch file into the benefits system, which prompts the termination of access. This process could result in an individual retaining access to the benefits system for up to two weeks after their last day of employment. In addition, the HR Benefits department noted that the untimely termination of access for two employees was the result of a delay in the batch upload. For the third employee, the untimely termination was the result of an error in the batch file. The individual was marked as “inactive” rather than “terminated,” which did not prompt system access termination.

The HR Benefits department of the University should develop a process to terminate user access to the benefits system when the employee separates from the University or as soon as the employee no longer needs access to the benefits system to perform assigned job duties. Only 18 employees currently have access to the benefits system, all of whom are centrally located in the HR Benefits or Payroll departments. Therefore, due to the centralized nature of human resources and payroll operations and the small number of users with access, it is reasonable to manually terminate the access as soon as practicable, but not later than the employee’s separation date. This improvement in the University’s process would greatly increase the security over the highly sensitive data contained in the benefits system.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.
2019-023: Improve Patient Accounting, Billing, and Management System Segregation of Duties

Applicable to: University of Virginia-Medical Center

Prior Year Finding Number: 2018-044
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

The University of Virginia Medical Center (Medical Center) continues to address the deficiency communicated in our prior year audit report to gain assurance that user access to the patient accounting, billing, and management system complies with the principle of least privilege. During fiscal year 2018, the University of Virginia (University) Audit Department (Audit Department) issued a segregation of duties audit report, which focused on access within the Medical Center’s patient accounting, billing, and management system. The primary concerns noted by the Audit Department included insufficient consideration or analysis of potential segregation of duties conflicts when changing user access templates, along with a lack of documented approval when making changes to templates.

The Medical Center Security Standard, section AC-5 Separation of Duties, requires that the organization separate the duties of individuals, document the separation of the duties of individuals, and define information system access authorizations to support separation of duties. The Medical Center has documented an analysis over sensitive security points and roles in the patient accounting, billing, and management system, and has been designing a plan to address concerns over segregation of duties. As of fiscal year end 2019, the Medical Center has not implemented this plan, and; therefore, the Medical Center has limited assurance that the access assigned complies with the principle of least privilege. Improper access to the patient accounting, billing, and management system increases the risk of improper activity within the system, which could subsequently affect the Medical Center’s financial statements.

The Medical Center should continue to address the recommendations made by the University Audit Department related to segregation of duties in the patient accounting, billing, and management system. By implementing its plan to limit access in compliance with the principle of least privilege, the Medical Center will be able to better monitor and avoid improper segregation of duties within the system.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.
2019-024: Remove Separated Employee Access in a Timely Manner

Applicable to: Department of Medical Assistance Services

Prior Year Finding Number: 2018-040; 2017-016
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency
CFDA Title and CFDA #: Medicaid Cluster - 93.775, 93.777, 93.778
Federal Award Number and Year: 1805VA5MAP - 2019
Name of Federal Agency: U.S. Department of Health and Human Services
Type of Compliance Requirement - Criteria: Other - 2 C.F.R. § 200.303(a)
Known Questioned Costs: $0

Medical Assistance Services did not remove access to the claims processing system timely for individuals who no longer needed access. Five out of 12 (42%) employees did not have their system access disabled within 24 hours of separation, which occurred during the first six months of the fiscal year. These employees retained their system access between two and 27 days after separation. In January 2019, Medical Assistance Services implemented a new process, but we continued to find issues with untimely removal of access. Two out of 12 (17%) employees who separated after January did not have their access terminated within 24 hours of separation. The employees retained access for five and 27 days after separation.

Additionally, one out of three (33%) employees did not have their access to the Commonwealth’s accounting and financial reporting system disabled timely following a change in job responsibilities. The employee retained system access for 60 days after the change in job responsibilities.

Medical Assistance Services’ IT Access Control AC-1 Policy Section A11 (b) (i) requires that “all user accounts must be disabled immediately upon separation or within 24 business hours upon receipt by the Office of Compliance and Security.” This internal policy is not in agreement with the Security Standard Section PS-4, which states an organization must disable information system access within 24 hours of employee separation and terminate any authenticators or credentials associated with the individual. Not timely disabling access to a web-based mission critical system threatens the data integrity of the system. If separated employees retain access to the claims processing system and the Commonwealth’s accounting and financial reporting system, users are potentially able to view, copy, and edit sensitive information.

Medical Assistance Services is not suspending separated employees’ access in a timely manner due to ineffective and untimely communication within the agency. The new exit clearance workflow process must be initiated by the employee’s supervisor in order for automatic notification to be sent to the Office of Compliance and Security (Compliance and Security) for removal of system access. There can also be differences in an employee’s last day in office and his or her separation date, which contributed to some of these exceptions. Additionally, disabling access to the claims processing system requires input from multiple employees within Compliance and Security.
For removing access to the Commonwealth’s accounting and financial reporting system, the process requires proper communication and manual approvals before access can be disabled. When combined with the issues noted above, the manual nature of the process often prevents timely removal of separated users. Lastly, Medical Assistance Services’ current internal policy is not in compliance with the Security Standard, and prior approval for this deviation was not obtained from VITA.

Compliance and Security and the Human Resources Division should establish effective, regular communication to report staff changes to those individuals responsible for managing system access to ensure users’ access is removed timely. In addition, Compliance and Security and the Human Resources Division should clarify its policy to ensure there is a consistent understanding of an employee’s last day of employment and his or her separation date. Lastly, Compliance and Security should evaluate its internal policy to ensure it is clear and also consistent with the Security Standard. Any exceptions to the Security Standard requirements need to be approved by VITA.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-025: Continue to Improve Controls Over Role Access

Applicable to: Department of Taxation

Prior Year Finding Number: 2018-035; 2017-018
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

Taxation’s management and its Office of Technology (Technology) did not properly restrict the access granted within security roles in their financial accounting and reporting system (system) based on the principle of least privilege. Although Taxation has various compensating controls in place, we found 14 out of the 35 security roles provided access to critical access functions in excess of the job duties of the employees assigned to these roles. Because of this, employees had unnecessary critical access in the financial accounting and reporting system.

Management made efforts to improve controls over the system’s access, specifically through their recertification process. Management provided training to the various department managers emphasizing the importance of certifying access based on least privilege. Even with the efforts, users continued to have security roles that allowed access to critical resources that were not necessary to their job functions. Managers stated they were not aware that they should have reviewed the resources associated with the roles when completing the recertification. Managers were also hesitant to delete access to a resource thinking it may result in a user being unable to complete their job responsibilities.
The Commonwealth’s Information Security Standard SEC 501 (Security Standard), Section 8.1 AC-6, requires an organization employ the principle of least privilege when granting access to ensure users only have access that is necessary to accomplish their assigned tasks. Management should ensure least privilege when certifying the access granted to ensure employees have the least amount of access necessary to perform their job duties. Additionally, Technology should ensure proper setup of the access functions to ensure they grant only the stated privileges in the financial accounting and reporting system.

**Views of Responsible Officials:**

*Views of responsible officials are in the report related to their agency, which can be found at [www.apa.virginia.gov](http://www.apa.virginia.gov). In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.*

**2019-026: Continue to Improve Information System Access Controls**

**Applicable to:** Department of the Treasury

**Prior Year Finding Number:** 2018-041; 2017-026  
**Type of Finding:** Internal Control and Compliance  
**Severity of Deficiency:** Significant Deficiency

In fiscal year 2017, we recommended that the Unclaimed Property Division (Unclaimed Property) of the Department of the Treasury (Treasury) strengthen access controls to two of its information systems used to administer unclaimed property to ensure access privileges are adequately defined and documented, are assigned based on the principle of least privilege, and ensure proper segregation of duties. During fiscal year 2018, Unclaimed Property corrected access issues related to one of the two systems. However, we recommended that Unclaimed Property should continue its efforts to adequately document access privilege descriptions and its policies and procedures for all processes including, but not limited to, ensuring segregation of duties exist for claim payments and for conducting periodic access reviews to ensure system access is appropriate. In addition, we recommended Treasury maintain adequate documentation supporting access privileges assigned.

During fiscal year 2019, Unclaimed Property has made significant improvements related to its Unclaimed Property system access controls. Unclaimed Property adequately defined and documented access privilege descriptions. In addition to the annual systems access review required by Treasury, Unclaimed Property has implemented and documented its process for a detailed review of its claims processing system to ensure access is appropriate. Unclaimed Property has identified access roles based on job duties to ensure least privilege and rolled out this new method of assigning access roles in phases during fiscal year 2020. We will test this new method during our fiscal year 2020 audit. Unclaimed Property has documented policies and procedures for a detective control related to ensuring segregation of duties exists for claim payments; however, in two of the eight months (25%) tested, review was performed more than three months (98 days) after the end of the period being reviewed.
The Security Standard, Section 8.1 AC-6, requires that Unclaimed Property employ the principle of least privilege when granting access. Additionally, the Security Standard, Section 8.1 AC-5 parts a through c, require that Unclaimed Property define and assign system access to support segregation of duties. Segregation of duties and access assigned based on the principle of least privilege reduces the risk of fraud and errors.

Unclaimed Property should document its expectation of timely review in its policies and procedures related to the detective control ensuring segregation of duties exist for claim payments.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-027: Improve Access Controls to Critical Systems

Applicable to: Department of Social Services

Prior Year Finding Number: 2018-042
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

Social Services does not have sufficient controls in place to ensure system access to critical systems is reasonable. Our review of user access across six critical systems identified the following:

- One new user was granted access permissions to Social Services’ financial system in excess of the employee’s job responsibilities;
- Three users were granted conflicting access to the Social Services’ financial system;
- Two terminated employees retained access to Social Services’ financial system;
- Two terminated employees retained access to Social Services’ central security system;
- One terminated employee retained access to the Commonwealth’s accounting and financial reporting system;
- Six terminated contractors retained access to the Social Services’ childcare system;
- One active user to the Social Services’ childcare system has two user login IDs, with different access for each ID;
• Three terminated employees retained access to the Commonwealth’s human resource system; two of the three had their access for over a year after employment termination; and

• Seven employees had unnecessary access privileges based on their job responsibilities to the Commonwealth’s retirement benefits system.

The Security Standard, Section 8.1 AC-2(j), requires the agency to “review accounts for compliance with account management on an annual basis or more frequently if required to address environmental change.” Security Standard 8.1 AC-6(7) requires the agency to “review on an annual basis the privileges assigned to all users to validate the need for such privileges; and to reassign or remove privileges, if necessary, to correctly reflect organizational mission/business needs.” The Security Standard, Section PS-4, states that the organization, upon employee termination “disables information system access within 24-hours of employment termination.” In addition, the Security Standard, AC-6, requires the agency to employ the principle of least privilege, allowing only authorized access for users that is necessary to accomplish assigned tasks.

Social Services does not have sufficient policies and procedures in place to ensure access is granted based on least privilege, access is removed timely, accurate based on conflicting access roles, and periodic reviews of access are completed. Additionally, the Separation and Transfer Checklist form does not include the Commonwealth’s accounting and financial reporting system; therefore, the Security Officer did not receive notification to terminate access. Not communicating when an employee terminates and not conducting adequate access reviews to critical systems threatens the integrity of the system and data housed within the system, and allows employees with unapproved access, which increases the risk of compromising confidentiality of Social Services’ critical data.

Social Services should update policies and procedures to reflect the requirements in the Security Standard. This would include ensuring access is granted based on the principal of least privilege, access is removed timely, and access does not involve conflicting roles. Social Services should update the Separation and Transfer Checklist form to include all systems and ensure there is proper communication with the Security Officer when there is a change with system access. Social Services should perform an annual access review of the critical systems and retain documentation of this review.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.
2019-028: Continue Improving Controls for Processing Access Terminations and Changes

Applicable to: Department of Motor Vehicles

Prior Year Finding Number: 2018-043
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

Motor Vehicles’ management acknowledges that the agency is still making improvements to its controls for removing access to agency and statewide systems for employees who either separate from the agency or change job responsibilities. This year, we noted an instance in which an employee’s supervisor did not notify a system owner timely to remove the user’s access. Instead, the user’s access was later removed during the next system access review. System access reviews are completed annually or semi-annually based on the system.

The Security Standard, Sections PS-4 and AC-2, requires Commonwealth organizations, upon termination of an individual’s employment to disable information system access within 24-hours and to notify account managers when users are terminated or transferred, respectively. In addition, Motor Vehicles’ Information Technology Access Control Policy calls for prompt termination of systems access upon termination or transfer. Untimely deletion of access to systems can expose the agency to inappropriate activity by individuals no longer employed by the agency or no longer in their previous position.

Management should continue their efforts to improve the notification process between supervisors and system owners to ensure required changes to user access are occurring in a timely manner. Additionally, management should also consider whether supervisors are the best initiators of the notification process to determine if another party should be responsible for initiating this process.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

Applicable to: Department of Corrections-Central Administration

Prior Year Finding Number: 2018-045
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

During the fiscal year 2018 audit, we determined Corrections is not performing an adequate annual review of system access to the Commonwealth’s attendance and leave system, Correction’s attendance and leave system, and the Commonwealth’s human resource system.

As of our report date, Corrections had implemented corrective actions with respect to this previously reported finding, but had not completely implemented all corrective actions.

Corrections should continue to improve procedures to ensure a detailed annual review of systems access to the Commonwealth’s attendance and leave system, Correction’s attendance and leave system, and the Commonwealth’s human resource system is performed.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-030: Improve Logical Access Controls for Users with Privileged Access

Applicable to: Virginia Alcoholic Beverage Control Authority

Prior Year Finding Number: 2018-046
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

ABC has not made sufficient progress since last year to update their account management processes for users with privileged access to meet the requirements in its current security standard, the Commonwealth’s Information Security Standard, SEC 501 (Security Standard). In addition, ABC became an Authority in January 2018 and, as such, received autonomy from following the requirements in the Security Standard beginning October 1, 2018, and has the ability to adopt a different security standard. Therefore, ABC is in the process of transitioning to the National Institute of Standards and Technology (NIST) Standard, 800-53 (NIST Standard) as its new security standard, and is developing policies and procedures based on the NIST Standard. Thus far, ABC has a complete password policy and access control policy. The policies received management’s formal approval in April 2019 and September 2019, respectively. ABC does not have accompanying procedures for the policies and they have yet to implement them into their information security program.
We addressed specific control weaknesses to management in a separate document marked Freedom of Information Act Exempt (FOIAE) under Section § 2.2-3705.2 of the Code of Virginia due to it containing descriptions of security mechanisms. The Security Standard and the NIST Standard requires ABC to implement specific controls to reduce unnecessary risk to data confidentiality, integrity, and availability.

ABC should remediate the weaknesses discussed in the communication marked FOIAE in a timely manner, and ensure they meet all the requirements in the NIST Standard as they transition away from the Security Standard.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-031: Improve Database Security

Applicable to: Department of Transportation

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

Transportation does not have a security control in place for a sensitive system’s database that is required by the Security Standard.

We communicated the control weakness to management in a separate document marked Freedom of Information Act (FOIA) Exempt under § 2.2-3705.2 of the Code of Virginia due to it containing descriptions of security mechanisms. The Security Standard requires the implementation of certain controls that reduce unnecessary risk to data confidentiality, integrity, and availability in systems processing or storing sensitive information. By not meeting the minimum requirements in the Security Standard and aligning the database’s settings and configurations with best practices, Transportation cannot ensure the confidentiality, integrity, and availability of data within the database or the information it reports.

Transportation should implement the security control discussed in the communication marked FOIA Exempt in accordance with the Security Standard.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.
2019-032: Implement Process for Ongoing Monitoring of System Access

Applicable to: Department of Education - Central Office Operations

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency
CFDA Title and CFDA #: Child Nutrition Cluster - 10.553, 10.555, 10.556, 10.559
Federal Award Number and Year: 201919N109941 - 2019
Name of Federal Agency: U.S. Department of Agriculture
Type of Compliance Requirement - Criteria: Other - 2 C.F.R. § 200.303(e)
Known Questioned Costs: $0

Education did not remove temporary elevated access to an employee for the School Nutrition Programs web application. During our review of web application access, we found that one employee of the six tested (17%) inappropriately retained access that allowed the employee to modify and submit annual agreements, as well as provide first and second levels of approval for annual agreements.

The Security Standard, Section AC-6: Least Privilege, states; “the organization employs the principle of least privilege, allowing only authorized access for users (or processes acting on behalf of users) which are necessary to accomplish assigned tasks in accordance with organizational missions and business functions.” The program specialist with extended access could have potentially modified and approved changes for the following year to the meal programs in which local school divisions participated, violating the established controls governing the web application.

In this case, Education intended to temporarily grant the employee elevated access; however, Education did not reduce the employee’s access rights after their task was completed. Additionally, Education does not have a review process in place to evaluate the reasonableness of access when it changes responsibilities for an employee. As a result, Education should develop formal policies and procedures for ongoing monitoring of existing user access to ensure the principle of least privilege is maintained.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.
2019-033: Improve Web Application Security

Applicable to: Department of Accounts

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

Information System Security Control Family: Access Control, System and Communications Protection

Accounts does not configure a mission critical and sensitive web application in accordance with the Security Standard. We communicated two control weaknesses to management in a separate document marked FOIAE under § 2.2-3705.2 of the Code of Virginia due to it containing descriptions of security mechanisms. The Security Standard requires the documentation and implementation of certain controls that reduce unnecessary risk to the confidentiality, integrity, and availability of Accounts' information systems and data.

Accounts should develop a plan and implement the controls discussed in the communication marked FOIAE in accordance with the Security Standard in a timely manner. Doing this will help to ensure Accounts secures the web application to protect its sensitive and mission-critical data.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-034: Improve the Budget System Database Governance and Security

Applicable to: Department of Planning and Budget

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

Information System Security Control Family: Audit and Accountability, Configuration Management, Contingency Planning, System and Information Integrity, Identification and Authentication

The Department of Planning and Budget (Planning and Budget) does not have adequate policies, procedures, and baseline configurations to delineate roles and responsibilities to support its database environment. As a result, it does not secure the database that supports the Commonwealth’s budget system in accordance with industry best practices and the Security Standard. We communicated the details of these weaknesses to management in a separate document marked FOIAE under § 2.2-3705.2 of the Code of Virginia due to its sensitivity and description of security controls.
Planning and Budget receives infrastructure services from VITA’s contractual partnership with various information technology (IT) service providers (Partnership) and outsources database administration for the budget system to an external vendor because it has limited resources to manage the database internally. However, Planning and Budget does not document roles and responsibilities between the agency, Partnership, and the external vendor to ensure all parties understand and are held accountable for securing and managing the database environment in accordance with the Security Standard and industry best practices.

Planning and Budget should develop agreements that outline the roles and responsibilities for each party to ensure all aspects of securing and managing the database are covered. Additionally, Planning and Budget should remediate the weaknesses communicated in the FOIAE document to align the configuration settings with the requirements in the Security Standard and industry best practices. Properly securing its database environment will maintain the confidentiality, integrity, and availability of sensitive and mission critical data.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-035: Improve Web Application Security

Applicable to: Department of Behavioral Health and Developmental Services

Prior Year Finding Number: 2018-027
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency
Information System Security Control Family: Access Control, Risk Assessment

DBHDS is not meeting some of the minimum requirements in the Security Standard for the web application. DBHDS uses the web application for wage employees, such as nurses and clinical staff, at the agency’s 13 facilities. The web application is the originating system for wage employee hours and interfaces with the Commonwealth’s payroll system. During fiscal year 2019, DBHDS had wage payroll totaling over $13.7 million making the integrity and availability of the web application critical to the agency. The following weaknesses exist for the web application:

- DBHDS only has one central administrator that manages and maintains the web application. Each facility has an administrator to handle small issues at their facility; however, the one central administrator at the Central Office is the only one responsible for tasks such as reviewing audit reports, setting up and configuring pay rules, granting and modifying administrator access for the facilities, and monitoring system performance. The Security Standard, Section AC-2-COV, requires DBHDS to have at least two individuals with administrator accounts to each IT system to provide continuity of operations. By having one
• DBHDS did not update the risk assessment after the web application went through a recent upgrade to the software and web servers. The Security Standard, Section RA-3, requires DBHDS to update the risk assessment on an annual basis or whenever there are significant changes to the information system or environment. Without completing new risk assessments when a system undergoes a significant modification, DBHDS may not identify risks to the system and implement the necessary mitigating controls.

The primary contributing factor to these security weaknesses is the lack of resources dedicated to administer the web application. The IT security group is working on updating the risk assessment and expects to complete it in early fiscal year 2020.

DBHDS should hire or assign an individual to be a backup to the central administrator. DBHDS should update the risk assessment to ensure sufficient mitigating controls are in place. Doing this will help to ensure DBHDS maintains the confidentiality, integrity, and availability of their mission critical and sensitive systems.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-036: Improve Access Controls over the Internal Accounting and Patient Revenue Systems

Applicable to: Department of Behavioral Health and Developmental Services

Prior Year Finding Number: 2018-038
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency
Information System Security Control Family: Access Control, Personnel Security

DBHDS does not have written policies and procedures over access to their internal accounting and financial reporting system. The most recent policies and procedures are from 2006, which are outdated and do not reflect changes that were implemented during the system upgrades that occurred during 2011 and 2015. In addition, DBHDS does not have adequate policies and procedures over the granting and monitoring of access to the internal patient accounting system. DBHDS does not have a formal process in place to monitor access periodically to the internal accounting and financial reporting system. Specifically, we found the following issues with user access to internal systems:

• Three out of 25 (12%) users tested had access to the internal accounting and financial reporting system that did not agree with the access level on the user access form. Although
DBHDS granted some levels of access to the employees upon request, account modification forms were created at the time of the auditor’s request to reflect actual access in the system at the time of our inquiry.

- One out of two (50%) terminated users tested had access to the internal accounting and financial reporting system that was not removed within 24 hours. Removal for this user took four days after termination.

- Four out of 13 (31%) users tested had access in the internal patient revenue system but did not have an access form on file at the time of auditor inquiry. These users have had access to the system since prior to the implementation of access forms. Therefore, DBHDS performed the documentation of access forms for the users retroactively.

In addition, we found that monitoring requests over the internal accounting and financial reporting system for Central Office users were not sent out to department managers until after the end of the fiscal year. Furthermore, the Information Security Office did not ensure confirmation of proper access from each facility during the fiscal year as at least six facilities did not respond to monitoring requests until after the end of the fiscal year. We noted that monitoring requests do not include requirements as to timeliness of review, which would ensure that timely monitoring of access occurs.

The Security Standard, Section PS-4, states an organization must disable information system access within 24 hours of employee separation and terminate any authenticators or credentials associated with the individual. The Security Standard, Section AC-6, requires granting access based on the principle of least privilege and only authorizing user access, which is necessary to accomplish tasks in accordance with organizational missions and business functions. Part 7 of Section AC-6 requires the performance of an annual review of access to validate that the need of such access still exists.

Not ensuring that system users have and retain appropriate access to the internal accounting and financial reporting system increases the risk of unauthorized individuals inappropriately entering or approving transactions and could affect the integrity of DBHDS transactions in the internal and Commonwealth’s accounting and financial reporting systems. Without a review of all accounts on an annual basis, DBHDS cannot verify that each user’s access is appropriate based on job functions, does not violate the principles of least privilege or separation of duties, and is configured appropriately. Due to an increased workload and lack of staff resources, personnel did not update internal policies and procedures over the internal accounting and financial reporting system. Personnel in the Information Security Office did not understand the purpose and timing of when to perform monitoring activities, which should be done regularly during the fiscal year rather than only prior to the audit.

DBHDS should establish and implement proper policies, procedures, and controls over access to the internal accounting and financial reporting system, as well as the internal patient revenue system. DBHDS should ensure that monitoring of access to the internal accounting and financial reporting system for all facilities and the Central Office occurs annually and throughout the year as opposed to at the time of auditor's request.
Social Services does not configure a sensitive web application in accordance with the Security Standard. We identified five control weaknesses and communicated them to management in a separate document marked FOIAE under § 2.2-3705.2 of the Code of Virginia, due to it containing descriptions of security mechanisms. The Security Standard requires agencies to implement certain controls that reduce unnecessary risk to the confidentiality, integrity, and availability of Social Services’ information systems and data.

Social Services should develop a plan to implement the controls discussed in the communication marked FOIAE in accordance with the Security Standard in a timely manner. Doing this will help to ensure Social Services secures the web application to protect its sensitive and mission critical data.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.
2019-038: **Improve IT Change and Configuration Management Process**

**Applicable to:** Department of Social Services

**Prior Year Finding Number:** N/A  
**Type of Finding:** Internal Control and Compliance  
**Severity of Deficiency:** Significant Deficiency  
**Information System Security Control Family:** Configuration Management, Access Control

Social Services does not follow an IT change and configuration management process that includes all elements required by the Security Standard. Change management is a key control to evaluate, approve, and verify configuration changes to security components.

We identified nine control weaknesses and communicated them to management in a separate document marked FOIAE under § 2.2-3705.2 of the Code of Virginia, due to it containing descriptions of security mechanisms. The Security Standard requires agencies to implement certain controls that reduce unnecessary risk to the confidentiality, integrity, and availability of Social Services’ information systems and data.

Social Services should develop a plan to implement the controls discussed in the communication marked FOIAE in accordance with the Security Standard in a timely manner. Improving Social Services’ IT change and configuration management processes will decrease the risk of unauthorized modifications to sensitive systems and help maintain the confidentiality, integrity, and availability of sensitive and mission critical data.

**Views of Responsible Officials:**

*Views of responsible officials are in the report related to their agency, which can be found at [www.apa.virginia.gov](http://www.apa.virginia.gov). In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.*
2019-039: Improve Web Application Security

Applicable to: Department of Health

Prior Year Finding Number: 2018-026
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency
Information System Security Control Family: System and Information Integrity, Contingency Planning, Configuration Management
CFDA Title and CFDA #: Immunization Cooperative Agreements - 93.268
Federal Award Number and Year: NH23IP000763 - 2018
Name of Federal Agency: U.S. Department of Health and Human Services
Type of Compliance Requirement - Criteria: Other - 2 C.F.R. § 200.303(e)
Known Questioned Costs: $0

Health does not secure two of their sensitive systems with some of the minimum security controls required by the Security Standard and industry best practices. We identified eight weaknesses across two different systems and communicated them to management in separate documents marked FOIAE under § 2.2-3705.2 of the Code of Virginia due to the descriptions of security mechanisms contained within the documents.

The Security Standard requires agencies to implement certain controls that reduce unnecessary risk to data confidentiality, integrity, and availability in systems processing or storing sensitive information. By not meeting the minimum requirements in the Security Standard, Health cannot ensure the confidentiality, integrity, and availability of data within its systems.

Health should implement the controls discussed in the communications marked FOIAE in accordance with the Security Standard and best practices in a timely manner.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.
2019-040: **Improve Server Operating System Security**

**Applicable to:** Virginia Lottery

**Prior Year Finding Number:** 2018-066  
**Type of Finding:** Internal Control and Compliance  
**Severity of Deficiency:** Significant Deficiency  
**Information System Security Control Family:** Configuration Management, Identification and Authentication, Audit and Accountability

Lottery made progress to remediate weaknesses since the prior year audit for one of the server operating systems that support Lottery’s primary financial management system but continues to implement the remaining security controls. These missing controls are requirements in Lottery’s information security policies and the Commonwealth’s Information Security Standard, SEC 501 (Security Standard). Further, industry best practices, such as the Center for Internet Security (CIS), also recommend certain controls to protect data confidentiality, integrity, and availability.

The missing controls relate to least functionality and system monitoring. We communicated details about the specific control weaknesses to management in a separate document marked Freedom of Information Act Exempt under § 2.2-3705.2 of the Code of Virginia due to it containing descriptions of security mechanisms.

Not configuring the server according to least functionality and using inadequate monitoring controls increases the risk that Lottery will not be able to prevent, detect, or mitigate security incidents involving the server in a timely manner that also complies with Lottery’s policy and the Security Standard.

Lottery should update their server configuration process to include the missing controls so that they align with Lottery’s policy, the Security Standard, and industry best practices. Implementing these controls will help maintain the confidentiality, integrity, and availability of the sensitive and mission critical data stored and processed on the server.

**Views of Responsible Officials:**

*Views of responsible officials are in the report related to their agency, which can be found at [www.apa.virginia.gov](http://www.apa.virginia.gov). In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.*
**2019-041: Improve Vulnerability Remediation Efforts**

**Applicable to:** Department of Education - Central Office Operations; Virginia Information Technologies Agency

**Prior Year Finding Number:** N/A

**Type of Finding:** Internal Control and Compliance

**Severity of Deficiency:** Significant Deficiency

**Information System Security Control Family:** System and Information Integrity, Risk Assessment

Education relies on VITA’s contractual partnership with various information technology (IT) service providers (Partnership) to install, maintain, operate, and support IT infrastructure components, such as servers, routers, firewalls, and virtual private networks. As a part of these services, Education relies on the Partnership to install security patches and updates to software to remediate weaknesses found in vulnerability scans.

During our review, we found that the Partnership is not installing certain security patches for Education’s systems to remediate vulnerabilities. The Partnership states it does not support certain software maintained for Education’s systems and that it is the responsibility of Education to maintain the software. However, Education does not have the ability to install patches for its systems because only the Partnership has administrative privileges to the servers. Additionally, VITA does not have a list of approved software to provide Education so the agency knows what software the Partnership will support.

The Commonwealth’s IT Risk Management Standard, SEC 520 (IT Risk Management Standard), Section 3.7 Vulnerability Scanning, requires vulnerability scans be performed at least once every 90 days and when new vulnerabilities potentially affecting the system or application are identified and reported. Additionally, legitimate vulnerabilities are required to be remediated within 90 days based on risk. Furthermore, the Commonwealth’s Information Security Standard, SEC 501 (Security Standard), section SI-2 Flaw Remediation, requires security-relevant software and firmware updates be installed within 90 days of the release of the update.

With the Partnership not installing certain security patches and updates, it increases the risk of cyberattack, exploit, and data breach by malicious parties. Education is aware of this issue and is working with the Partnership to develop remediation plans to install security patches and updates in accordance with the Security Standard. Additionally, the Commonwealth Security and Risk Management group within VITA is aware of the need to publish a list of approved software the Partnership will support.

Education should continue working with the Partnership to install current security patches and updates for its IT systems and workstations to remediate vulnerabilities and maintain up-to-date software. Additionally, VITA should develop and publish a list of approved software so Education is aware of the software the Partnership supports. Doing this will further reduce the risk to the confidentiality, integrity, and availability of sensitive Commonwealth data and achieve compliance with the Security Standard and IT Risk Management Standard.
Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding. Additionally, we provided management of the Virginia Information Technologies Agency (VITA) with a copy of this finding for their response. VITA’s management elected not to provide a response for inclusion in the audit report.

2019-042: Improve Web Application Security

Applicable to: Department of Education - Central Office Operations

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency
Information System Security Control Family: Audit and Accountability, System and Communications Protection

Education does not configure a sensitive web application in accordance with the Security Standard. We identified three control weaknesses and communicated them to management in a separate document marked FOIAE under § 2.2-3705.2 of the Code of Virginia, due to it containing description of security mechanisms. The Security Standard requires agencies to implement certain controls that reduce unnecessary risk to the confidentiality, integrity, and availability of Education’s information systems and data.

Education took immediate corrective action to subsequently resolve two of the three weaknesses included in the FOIAE document. Education should develop a plan to implement the remaining control included in the communication marked FOIAE in accordance with the Security Standard and in a timely manner. Doing this will help to ensure Education secures the web application to protect its sensitive and mission critical data.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.
2019-043: **Improve Database Security**

**Applicable to:** Virginia Alcoholic Beverage Control Authority

**Prior Year Finding Number:** N/A  
**Type of Finding:** Internal Control and Compliance  
**Severity of Deficiency:** Significant Deficiency  
**Information System Security Control Family:** Audit and Accountability, Access Control, Configuration Management, Identification and Authentication

ABC does not secure the database that supports its human resource system with certain minimum-security controls in accordance with the Security Standard and industry best practices.

We communicated the control weaknesses to management in a separate document marked Freedom of Information Act (FOIA) Exempt under § 2.2-3705.2 of the Code of Virginia due to it containing descriptions of security mechanisms. The Security Standard and industry best practices require the implementation of certain controls that reduce unnecessary risk to data confidentiality, integrity, and availability in systems processing or storing sensitive information.

ABC should ensure database configurations, settings, and controls align with its policies and the requirements in the Security Standard and industry best practices, such as the Center for Internet Security Benchmark. Implementing these controls will help maintain the confidentiality, availability, and integrity of the sensitive and mission critical data stored or processed in the database. ABC should ensure they meet all the requirements in the NIST Standard as they transition away from the Security Standard.

**Views of Responsible Officials:**

Views of responsible officials are in the report related to their agency, which can be found at [www.apa.virginia.gov](http://www.apa.virginia.gov). In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.
2019-044: **Improve Database Security**

**Applicable to:** Virginia Employment Commission

**Prior Year Finding Number:** N/A  
**Type of Finding:** Internal Control and Compliance  
**Severity of Deficiency:** Significant Deficiency  
**Information System Security Control Family:** Configuration Management, Contingency Planning, Access Control

**CFDA Title and CFDA #:** Unemployment Insurance - 17.225  
**Federal Award Number and Year:** UI-32632-19-55-A-51 - 2019  
**Name of Federal Agency:** U.S. Department of Labor  
**Type of Compliance Requirement - Criteria:** Special Tests and Provisions - 20 C.F.R. §§ 600 - 656  
**Known Questioned Costs:** $0

The Virginia Employment Commission (Commission) does not secure one of their sensitive system’s database with some of the minimum security controls required by its policies and the Commonwealth’s Information Security Standard, SEC501 (Security Standard). The Security Standard requires agencies to implement certain minimum controls to protect the confidentiality, integrity, and availability of the system’s data.

We communicated five control weaknesses to management in a separate document marked Freedom of Information Act Exempt (FOIAE) under Section §2.2-3705.2 of the Code of Virginia due to it containing descriptions of security mechanisms. By not meeting the minimum requirements in the Security Standard and aligning the database’s settings and configurations with best practices, the Commission cannot ensure the confidentiality, integrity, and availability of data within the database or the information it reports.

The Commission should dedicate the necessary resources to implement the control discussed in the communication marked FOIA Exempt in accordance with the Security Standard and best practices in a timely manner.

**Views of Responsible Officials:**

*Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.*
CONTINGENCY PLANNING

2019-045: Improve IT Contingency Management Program

Applicable to: Department of Behavioral Health and Developmental Services

Prior Year Finding Number: 2018-053; 2017-065
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

DBHDS does not have complete and current Continuity of Operations Plans (COOP) and IT Disaster Recovery Plans (DRP) for the facilities and the Central Office. DBHDS has hospitals, mental health institutes, and training centers that manage their own mission critical IT applications that help provide patient services. Three of these facilities do not have a COOP, one facility and the Central Office do not have a DRP, and the remaining facilities’ COOPs and DRPs are out-of-date, with some as old as 2009. In addition, the Central Office and the facilities are not performing annual tests on the COOPs or DRPs.

DBHDS had plans to work with the Virginia Information Technologies Agency (VITA) and the new managed services with multi-sourcing services integrator to obtain cost estimates and develop a plan to address disaster recovery and continuity of operations; however, turnover in the Chief Information Officer and Chief Information Security Officer positions as well as staff turnover are the primary factors for not completing this effort. DBHDS does not have an estimate when they will complete the work to obtain cost estimates and develop current IT COOPs and IT DRPs.

The Security Standard, Section CP-1, requires DBHDS to develop and disseminate procedures to facilitate the implementation of a contingency planning policy and associated contingency planning controls. The Security Standard also requires the agency to maintain current COOPs and DRPs and conduct annual tests against the documents to assess their adequacy and effectiveness.

By not having current COOPs and DRPs, DBHDS increases the risk of mission critical systems being unavailable to support patient services. In addition, by not performing annual tests against the COOPs and DRPs, DBHDS is unable to identify weaknesses in the plans and may unnecessarily delay the availability of sensitive systems in the event of a disaster or outage.

DBHDS should assign the necessary resources and work with VITA and the multi-sourcing services integrator to remediate the weaknesses in the continuity of operations and disaster recovery processes and ensure the contingency management program meets the minimum requirements in the Security Standard. DBHDS should develop and update the COOPs and DRPs ensuring they are consistent across the facilities and the Central Office. Once the COOPs and DRPs are complete, DBHDS should perform annual tests against them to ensure the Central Office and the facilities can restore mission critical and sensitive systems in a timely manner in the event of an outage or disaster. Doing this will help to ensure DBHDS maintains the confidentiality, integrity, and availability of their mission critical and sensitive systems.
Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-046: Improve Disaster Recovery for Sensitive Systems

Applicable to: Department of Behavioral Health and Development Services

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

DBHDS does not perform certain processes in its disaster recovery plan required by the Security Standard and industry best practices. We identified a weakness in this area and communicated this to management in a separate document marked Freedom of Information Act Exempt (FOIAE) under § 2.2-3705.2 of the Code of Virginia due to descriptions of security mechanisms contained within the document.

The Security Standard requires agencies to implement certain controls that reduce unnecessary risk to data confidentiality, integrity, and availability in systems processing or storing sensitive information. By not meeting the minimum requirements in the Security Standard, DBHDS cannot ensure the confidentiality, integrity, and availability of data within its systems.

DBHDS should implement the controls discussed in the communication marked FOIAE in accordance with the Security Standard and best practices in a timely manner.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.
2019-047: Improve Contingency Management Program

Applicable to: Department of Health

Prior Year Finding Number: 2018-055
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

Health does not perform certain processes in their contingency management program required by the Security Standard and industry best practices. We identified two weaknesses and communicated them to management in a separate document marked FOIAE under § 2.2-3705.2 of the Code of Virginia due to the descriptions of security mechanisms contained within the document.

The Security Standard requires agencies to implement certain controls that reduce unnecessary risk to data confidentiality, integrity, and availability in systems processing or storing sensitive information. By not meeting the minimum requirements in the Security Standard, Health cannot ensure the confidentiality, integrity, and availability of data within its systems.

Health should implement the controls discussed in the communication marked FOIAE in accordance with the Security Standard and best practices in a timely manner.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-048: Improve the Disaster Recovery Plan

Applicable to: Department of Health

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

Health does not perform certain processes in its disaster recovery plan required by the Security Standard and industry best practices. We identified a weakness in this area and communicated this to management in a separate document marked FOIAE under § 2.2-3705.2 of the Code of Virginia due to descriptions of security mechanisms contained within the document.

The Security Standard requires agencies to implement certain controls that reduce unnecessary risk to data confidentiality, integrity, and availability in systems processing or storing sensitive information. By not meeting the minimum requirements in the Security Standard, Health cannot ensure the confidentiality, integrity, and availability of data within its systems.
Health should implement the controls discussed in the communication marked FOIAE in accordance with the Security Standard and best practices in a timely manner.

**Views of Responsible Officials:**

Views of responsible officials are in the report related to their agency, which can be found at [www.apa.virginia.gov](http://www.apa.virginia.gov). In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

**2019-049: Develop Records Retention Requirements and Processes for Case Management System**

**Applicable to:** Department of Social Services

**Prior Year Finding Number:** 2018-054  
**Type of Finding:** Internal Control and Compliance  
**Severity of Deficiency:** Significant Deficiency  
**CFDA Title and CFDA #:** Medicaid Cluster - 93.775, 93.777, 93.778  
**Federal Award Number and Year:** 1905VA5MAP - 2019  
**Name of Federal Agency:** U.S. Department of Health and Human Services  
**Type of Compliance Requirement - Criteria:** Other - 2 C.F.R. § 200.303(e)  
**Known Questioned Costs:** $0

Social Services did not make progress to develop and implement electronic records retention requirements for its case management system. We communicated the deficiencies to management in a separate document marked FOIAE under § 2.2-3705.2 of the Code of Virginia due to it containing descriptions of security mechanisms.

Federal regulations require different record retention requirements for different federal programs. Additionally, the Virginia Public Records Act (§ 42.1-91 of the Code of Virginia) requires each agency to be responsible for ensuring that its public records are preserved, maintained, and accessible throughout their lifecycle, including converting and migrating electronic records as often as necessary so that information is not lost due to hardware, software, or media obsolescence or deterioration. Furthermore, the Security Standard, Section CP-9-COV, requires for every IT system identified as sensitive relative to availability, an agency implement backup and restoration plans that address the retention of the data in accordance with the records retention policy.

Retaining records longer than necessary causes the Commonwealth to spend additional resources to maintain, back-up, and protect the information. Additionally, without documenting and implementing records retention requirements, Social Services may not be able to ensure that backup and restoration efforts will provide mission essential information according to recovery times. Social Services placed corrective actions on hold due to competing priorities of Medicaid expansion and other corrective actions within the IT environment. Social Services’ goal is to develop and implement record retention requirements in November 2020.
Social Services should identify retention requirements for the data within its case management system. Additionally, Social Services should implement a process, whether a manual process or automated control, to ensure consistent compliance with the retention requirements the agency identifies for each data set within the IT system.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-050: Continue to Improve Disaster Recovery Planning Documentation

Applicable to: Department of Taxation

Prior Year Finding Number: 2018-056
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

Taxation made progress to improve its risk management documentation since the previous audit by updating its Business Impact Analysis (BIA). However, Taxation did not update its disaster recovery documentation, specifically its Contingency Plan (CP) and Information Technology (IT) Disaster Recovery Plan (DRP), to consistently reflect recovery expectations and meet the requirements in the Security Standard. Additionally, Taxation does not consistently use disaster recovery plan nomenclature in its contingency planning documentation.

We communicated the specific control weaknesses to management in a separate document marked Freedom of Information Act Exempt (FOIAE) under § 2.2-3705.2 of the Code of Virginia due to it containing descriptions of security mechanisms.

Inconsistent recovery expectations and ambiguous language reduces the effectiveness of Taxation’s disaster recovery planning documentation. Taxation should make the necessary revisions, as discussed in the separate FOIAE communication, to become compliant with the Security Standard and improve the effectiveness of its plans.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.
2019-051: **Complete and Approve the System Security Plan**

**Applicable to:** Department of Medical Assistance Services

**Prior Year Finding Number:** N/A  
**Type of Finding:** Internal Control and Compliance  
**Severity of Deficiency:** Significant Deficiency

**CFDA Title and CFDA #:** Medicaid Cluster - 93.775, 93.777, 93.778  
**Federal Award Number and Year:** 1805VA5MAP - 2019  
**Name of Federal Agency:** U.S. Department of Health and Human Services  
**Type of Compliance Requirement - Criteria:** Special Tests and Provisions - 45 C.F.R. § 95.621(f)  
**Known Questioned Costs:** $0

Medical Assistance Services does not have a complete and formally approved System Security Plan (SSP) with the vendor that manages the claims processing system. Medical Assistance Services has been working with the vendor to ensure they are in compliance with their contractual requirements and complete the SSP in response to findings from an external 2017 system security review. Medical Assistance Services continues to work with the vendor, but the SSP is not complete and multiple gaps remain between the vendor’s controls and Medical Assistance Services’ internal policies and procedures.

The contract between Medical Assistance Services and the vendor, Section 6.0 Security and Risk Assessment, states that the vendor will maintain a current SSP according to Medical Assistance Services’ policies, procedures, standards, and guidelines. Additionally, 45 C.F.R. § 95.621 requires the establishment of a security plan that addresses various system security requirements.

An SSP is important because it documents the minimum control requirements the vendor must implement to protect confidential and sensitive Commonwealth data. Without a complete SSP that has the formal approval of Medical Assistance Services and the vendor, the system may lack certain controls to protect the confidentiality, integrity, and availability of its mission essential data. Additionally, without a complete SSP, the roles and responsibilities between Medical Assistance Services and the vendor may be unclear, thereby increasing the risk of service disruption or data breach due to missing or ambiguous controls.

Medical Assistance Services did not meet its original due date, March 31, 2018, for completing the SSP because Medical Assistance Services is in the process of replacing the current system and the vendor has competing priorities with transitioning to the new system. Medical Assistance Services should complete the SSP and receive formal approval to ensure the vendor is meeting their contractual obligations. Medical Assistance Services should also ensure the SSP aligns with the requirements in its own policies, procedures, standards, and guidelines. Medical Assistance Services is unable to provide a specific completion date when the SSP will be complete and receive formal approval but has set a tentative goal of December 31, 2019.
Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-052: Develop a Process to Maintain Oversight for Third-Party Providers

Applicable to: Department of Social Services

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency
CFDA Title and CFDA #: TANF Cluster - 93.558
Federal Award Number and Year: 1901VATANF - 2019
Name of Federal Agency: U.S. Department of Health and Human Services
Type of Compliance Requirement - Criteria: Other - 2 C.F.R. § 200.303(e)
Known Questioned Costs: $0

Social Services does not have a formal process to manage its third-party Software as a Service (SaaS) providers that fall under VITA’s Enterprise Cloud Oversight Service (ECOS). Social Services uses VITA’s ECOS to assist the agency with gaining assurance that its SaaS providers implement the minimum security requirements required by the Commonwealth’s Hosted Environment Information Security Standard, SEC 525 (Hosted Environment Security Standard).

Specifically, Social Services does not have any policies or procedures that assign roles and responsibilities to ensure the correct employees, such as contract administrators or system owners, work with VITA’s ECOS to receive and review communications from the SaaS providers. Additionally, Social Services does not have procedures or a process to ensure VITA’s ECOS communicates with its SaaS providers to resolve weaknesses that are identified in the SaaS providers’ independent audit reports. As a result, the SaaS provider that hosts Social Services’ electronic benefits processing system and administers electronic payment of benefit cards for benefit programs such as SNAP, TANF, and Child Support received a qualified opinion in its two most recent independent audit reports and neither Social Services nor VITA’s ECOS performed any follow-up with the SaaS provider to determine if they are properly remediating the weaknesses.

Executive branch agencies, such as Social Services, that receive IT services from VITA must follow the Third-Party Use Policy, which requires agencies to receive written approval from VITA prior to procuring, signing, or engaging with a third-party hosted (cloud) service, specifically SaaS providers. Social Services signed a Memorandum of Understanding (MOU) with VITA’s ECOS that requires Social Services to review and approve all documentation evidencing VITA ECOS’ performance of services to monitor compliance with the MOU. Additionally, the Hosted Environment Security Standard, Section 1.1, states management remains accountable for maintaining compliance with the Hosted Environment Security Standard through documented agreements and oversight of services provided.
Without a formal process to review and maintain VITA ECOS’ documentation, Social Services cannot validate whether its SaaS providers implement security controls that meet the requirements in the Hosted Environment Security Standard to protect the agency’s sensitive and confidential data. Social Services was unaware of its oversight responsibilities in the MOU for VITA’s ECOS, which led to the weaknesses described above.

Social Services should develop a formal process to monitor and maintain oversight of its third-party SaaS providers to ensure they comply with the Hosted Environment Security Standard and that VITA’s ECOS is meeting all requirements in the MOU. Doing this will help maintain the confidentiality, integrity, and availability of sensitive and mission critical data.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-053: Create Processes for Review and Assessment of Third-Party Service Provider’s Controls

Applicable to: Department of Behavioral Health and Developmental Services

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

DBHDS does not have a formal process for identifying third-party service providers and evaluating their controls. DBHDS is not gaining annual assurance over the internal controls of two third-party service providers through review of Service Organization Control (SOC) reports or similar independent attestations. Specifically, for the third-party configuration of a system to support inpatient and long-term care functions for twelve DBHDS facilities, as well as, third-party administration of healthcare benefits for off-campus medical services provided to patients under DBHDS care. DBHDS relies on the provider of healthcare benefits to accurately calculate rates and discounts associated with charges from off-campus medical service providers. Additionally, both providers are responsible for the secure storage and transfer of patient data protected by HIPAA.

The Security Standard, Section SA-9-COV 3.1, requires agencies to perform an annual security audit of the environment or review the annual audit report of the environment conducted by an independent, third-party audit firm on an annual basis. Furthermore, the contract terms for the inpatient and long-term care system state that DBHDS shall ensure performance of a Type 2 SOC audit at least once annually.

Without performing a review of SOC reports or similar attestations, DBHDS cannot ensure that third-party service provider’s controls are designed, implemented, and operating effectively. This increases the Commonwealth’s risk that it will not detect a weakness in a provider’s environment,
thereby exposing the Commonwealth to potential vulnerabilities created by third-party service providers. According to management, there is currently not a process in place for identifying and evaluating the controls of significant third-party service providers as they relate to finance. Additionally, management does not see the need to obtain assurance over the internal controls of the third-party service provider responsible for the administration of health care benefits for off-campus medical care.

DBHDS should create a documented process for identifying third-party service providers and assessing controls. DBHDS should consider which of its outsourced services merit a review of SOC reports or other attestations and should then document the results of its reviews in order to ensure the effectiveness of the third-party service providers’ controls. If weaknesses are identified in the SOC reports or other attestations, DBHDS should implement complementary controls to mitigate the risk to the Commonwealth until the provider corrects the deficiency.

*Views of Responsible Officials:*

*Views of responsible officials are in the report related to their agency, which can be found at [www.apa.virginia.gov](http://www.apa.virginia.gov). In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.*

**2019-054: Practice Oversight of Service Providers Throughout the Lifecycle of a Project**

**Applicable to:** Department of Motor Vehicles

**Prior Year Finding Number:** N/A  
**Type of Finding:** Internal Control and Compliance  
**Severity of Deficiency:** Significant Deficiency

Motor Vehicles is not practicing oversight of the third-party service provider (provider) managing one of its systems used for collecting and recording revenues. Motor Vehicles communicated security requirements to the provider during the development of the system and ensured the database met the minimum-security requirements when the first phase went into production; however, Motor Vehicles did not plan to begin oversight of this portion of the new system until all phases of the project are in production.

The Commonwealth’s Hosted Environment Security Standard, SEC 525 (Hosted Standard), Section 1.1, requires that Motor Vehicles’ management remains accountable for maintaining compliance with the requirements in the Hosted Standard through documented agreements and oversight of services provided. Additionally, Section SA-9 requires Motor Vehicles to employ processes to monitor security control compliance by external providers on an ongoing basis.

Collecting and recording revenues is mission critical to Motor Vehicles and the Commonwealth. By not maintaining oversight of the first phase placed into production, Motor Vehicles did not detect that the database was no longer meeting the minimum-security requirements in the contract, and this
increased the risk to the confidentiality, integrity, and availability of sensitive and mission critical data used in collecting and recording revenues.

According to management, Motor Vehicles is not maintaining oversight because the contract between Motor Vehicles and the provider has that Motor Vehicles will begin oversight once the provider completes all phases of the project. Management should reevaluate its contract with the provider to ensure it does not preclude Motor Vehicles from continually meeting requirements in the Hosted Standard and, if there are none, begin oversight of the system in production. Additionally, management should develop a plan to remediate any perceived or actual barriers that may cause Motor Vehicles to not practice oversight of the provider.

**Views of Responsible Officials:**

*Views of responsible officials are in the report related to their agency, which can be found at [www.apa.virginia.gov](http://www.apa.virginia.gov). In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.*

**AWARENESS AND TRAINING**

**2019-055: Improve Security Awareness Training Program**

**Applicable to:** University of Virginia-Academic Division

**Prior Year Finding Number:** 2018-067; 2017-067; 2016-063  
**Type of Finding:** Internal Control and Compliance  
**Severity of Deficiency:** Significant Deficiency

The University of Virginia Academic Division (Academic Division) is making progress to address an information security weakness communicated in our prior year audit report regarding improving the security awareness training program; however, corrective action remains in progress.

The Academic Division’s Information Technology Services (ITS) established a process to track whether faculty and staff complete their annual security awareness training. Additionally, ITS established a procedure that requires employees to complete security awareness training in order to receive access to the Academic Division’s highly sensitive network.

However, the process does not include security awareness training requirements for faculty and staff with access to other parts of the Academic Division’s networks. Despite these network segments residing outside the highly sensitive network, they are used daily by the University’s faculty and staff community to conduct business and to connect to web portals that connect to systems within the highly sensitive network. It is, therefore, imperative that these users receive security awareness training before, or as soon as practicable after, receiving their access. During calendar year 2018, 2,318 out of 7,093 faculty and staff (33%) that do not have direct access to the highly sensitive network did not complete their assigned training.
The Academic Division’s adopted information security standard, ISO 27002 (Academic Division Security Standard), section 7.2.2, states that organizations should train all users on a regular basis and that organizations provide initial security awareness training to employees transferring to new positions, as well as to new hires, before the role becomes active. Additionally, the Academic Division’s Data Protection Standards require that faculty, staff, and other affiliates granted access to the Academic Division’s data must complete information and security awareness training annually. Ineffective security awareness training increases the risk of security incidents related to untrained users falling victim to common cyber-attacks, such as phishing or social engineering.

The Academic Division plans to continue to incorporate annual security awareness training into its recently implemented learning management system (LMS). ITS should develop a strategy to comply with the Academic Division Security Standard and Data Protection Standards, and provide a sufficient level of security awareness training to all sectors of its faculty and staff who have access to Academic Division networks. The fiscal year 2020 audit will include an evaluation of the Academic Division’s completed corrective action and determine whether it satisfactorily resolved the weakness.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-056: Improve Security Awareness Training Program

Applicable to: Virginia Alcoholic Beverage Control Authority

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

ABC is not meeting certain requirements in the Security Standard for security awareness training (SAT). Specifically, ABC does not have an adequate process to ensure all users complete SAT, and ABC does not require users with specific information security roles to complete role-based training.

ABC does not have an enforcement measure that requires users to take SAT. The lack of this control resulted in 120 out of 449 (approximately 27%) users who did not take the SAT training within the past year. ABC assigns oversight of the SAT program to the Information Security Officer (ISO) and the Human Resource Information Systems Manager. These individuals monitor whether users complete the training and send email notifications to users who have not completed the training in the past year. However, ABC has no other process to enforce the training requirement outside of sending the email notifications. ABC’s Security Awareness and Training Policy requires users to take SAT within 30 days of receiving access to ABC resources and annually thereafter. Additionally, the Security Standard requires that all computer users complete SAT initially upon employment, after significant changes in the environment, and annually thereafter (Security Standard section: AT-2 Security Awareness). Without an
adequate process to ensure that all users take SAT annually, ABC increases the risk that users will be more susceptible to malicious attempts to compromise sensitive data, such as ransomware, phishing and social engineering.

ABC does not provide role-based training to users with designated security roles, such as system owners, data owners, system administrators, or security personnel. ABC’s Security Awareness and Training Policy requires that personnel who manage, administer, operate, or design IT systems receive additional training commensurate with their roles and responsibilities. Additionally, the Security Standard requires role-based training initially, when required by information system changes, and as practical and necessary thereafter for personnel with assigned security roles and responsibilities. (Security Standard sections: AT-3 Role-Based Security Training). Lack of adequate role-based training increases the risk that users will be unaware or lack pertinent skills and knowledge to perform their security related functions, increasing the risk to sensitive data.

Approximately 27 percent of users did not complete the security awareness training in the past year because ABC does not have an enforcement measure, such as disabling a user’s account until training is complete, that forces users to take the training and comply with ABC’s security awareness training policy. In addition, although ABC requires additional role-based training, ABC has not developed, documented, and implemented a process to provide role-based training to users with these designated security roles.

ABC should develop, document, and implement a formal process that includes an enforcement measure and require all users to complete SAT training before accessing computer resources and on an annual basis thereafter. Additionally, ABC should develop a procedure and process to ensure the ISO and Managers provide role-based training to users with designated security roles. Improving the SAT program will help protect ABC from malicious attempts to compromise the confidentiality, integrity, and availability of sensitive data. ABC should ensure they meet all the requirements in the NIST Standard as they transition away from the Security Standard.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.
2019-057: Improve Web Application Security Controls

Applicable to: Department of Human Resource Management

Prior Year Finding Number: 2018-069; 2017-033; 2016-015; 2015-010
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

Human Resource Management continues to not implement certain minimum security controls for a sensitive web application required by the Commonwealth’s Information Security Standard, SEC 501 (Security Standard), and industry best practices. Lacking application controls can create vulnerabilities that expose data to potential compromises and affect system availability, which, could lead to reputational damage and financial penalties for Human Resource Management.

We communicated the specific control weaknesses and compliance references to management in a separate document marked Freedom of Information Act Exempt (FOIAE) under § 2.2-3705.2 of the Code of Virginia due to it containing descriptions of security mechanisms.

The weaknesses identified in the FOIAE document continue to persist in Human Resource Management’s environment due to limited information technology (IT) resources and inadequate collaboration with the Virginia Information Technologies Agency (VITA). Human Resource Management should allocate the necessary resources and continue to work with VITA to remediate the weaknesses and meet the requirements in the Security Standard. Remediating these weaknesses will help to protect the confidentiality, integrity, and availability of data in the application environment.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-058: Improve Web Application Security

Applicable to: Department of the Treasury

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

Treasury does not configure a sensitive web application in accordance with the Security Standard. We identified one control weakness and communicated it to management in a separate document marked FOIAE under § 2.2-3705.2 of the Code of Virginia due to it containing descriptions of security
mechanisms. The Security Standard requires agencies to implement certain controls that reduce unnecessary risk to the confidentiality, integrity, and availability of Treasury’s information systems and data.

Treasury should develop a plan to implement the control discussed in the communication marked FOIAE in accordance with the Security Standard in a timely manner. Doing this will help to ensure Treasury secures the web application to protect its sensitive and mission-critical data.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

AUDIT AND ACCOUNTABILITY

2019-059: Continue Improving Database Security

Applicable to: Department of Social Services

Prior Year Finding Number: 2018-058; 2017-031; 2017-032; 2016-017
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency
CFDA Title and CFDA #: Medicaid Cluster - 93.775, 93.777, 93.778
Federal Award Number and Year: 1905VA5MAP - 2019
Name of Federal Agency: U.S. Department of Health and Human Services
Type of Compliance Requirement - Criteria: Other - 2 C.F.R. § 200.303(e)
Known Questioned Costs: $0

Social Services continues to not perform certain security procedures over the databases supporting its financial reporting system and case management system in accordance with the Security Standard and industry best practices. We communicated the weaknesses for both systems to management in a separate document marked FOIAE under § 2.2-3705.2 of the Code of Virginia due to its sensitivity and description of security controls.

The Security Standard requires agencies to implement certain minimum controls that reduce unnecessary risk to data confidentiality, integrity, and availability in systems processing or storing sensitive information. By not implementing the controls discussed in the FOIAE communication, the systems’ databases are not secure against known vulnerabilities. This increases the risk for malicious users to exploit those vulnerabilities and compromise sensitive Commonwealth data.

Social Services should dedicate the necessary resources to ensure that database procedures and controls align with the requirements in the Security Standard. Additionally, Social Services should
consistently implement controls across all of its systems. Doing this will help maintain the confidentiality, integrity, and availability of sensitive and mission critical data.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at [www.apa.virginia.gov](http://www.apa.virginia.gov). In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-060: Continue Improving Database Security

Applicable to: Department of Education - Central Office Operations

Prior Year Finding Number: 2018-057; 2017-030; 2016-009
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

Education continues to make progress to improve a security control for its database that stores its financial activity in accordance with the Security Standard. We communicated the remaining control weakness to management in a separate document marked Freedom of Information Act Exempt (FOIAE) under § 2.2-3705.2 of the Code of Virginia due to it containing descriptions of security mechanisms. Since the prior year audit, Education is actively working with the Commonwealth’s IT Partnership to implement a solution and resolve the weakness. The Security Standard requires agencies to implement certain controls that reduce unnecessary risk to data confidentiality, integrity, and availability in systems processing or storing sensitive information. By not meeting the minimum requirements in the Security Standard, Education cannot ensure the confidentiality, integrity, and availability of data within the database or the information it reports.

Education should continue working with the Partnership to implement the control discussed in the communication marked FOIAE in accordance with the Security Standard and in a timely manner.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at [www.apa.virginia.gov](http://www.apa.virginia.gov). In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.
2019-061: Dedicate Resources to Support Information Security Program

Applicable to: Department of Behavioral Health and Developmental Services

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

DBHDS has been unable to adequately manage and dedicate the necessary resources to support its sensitive systems according to Commonwealth’s standards. DBHDS has 211 sensitive systems between the Central Office and the facilities. This number of sensitive systems requires extensive information technology (IT) resources to ensure compliance with the agency’s enterprise security program and the Security Standard.

DBHDS stated there are insufficient IT resources at the Central Office and the facilities to properly manage the systems. As a result, DBHDS continues to have weaknesses in certain areas of their information security program with some weaknesses being repeat management recommendations for four years. Specifically, the lack of software baseline configurations and the lack of IT contingency management documentation are areas of concern.

DBHDS began the Facility Application Inventory Reduction initiative in 2017 to reduce the number of applications across the facilities and improve their IT governance program. However, due to a lack of resources and funding, DBHDS did not make progress with this initiative until recently. DBHDS is currently implementing two IT systems that will replace 20 disparate facility systems, bringing the total number of sensitive systems to 191. DBHDS is also working on an enterprise initiative that has the potential to reduce a significant number of systems across the facilities, but the exact number is not yet known. DBHDS stated it is evaluating the resource levels to support the sensitive systems at the Central Office and will do the same for the facilities and expects to complete this effort in April 2020. DBHDS is also implementing a new governance process to manage the procurement and implementation of IT systems at the Central Office and the facilities. DBHDS has a goal to finalize and begin using the new governance process in the first quarter of fiscal year 2020.

Section 2.4.2 of the Security Standard states agency heads are responsible for ensuring that a sufficient information security program is maintained, documented, and effectively communicated to protect the agency’s IT systems. Not having sufficient IT resources to manage the sensitive systems at the Central Office and the facilities increases the risk that certain controls may not exist resulting in a data breach or unauthorized access to confidential and mission-critical data. If a breach occurs and Health Insurance Portability and Accountability Act (HIPAA) data is stolen, the agency can incur large penalties, as much as $1.5 million.

DBHDS should continue to reduce its sensitive system inventory and complete the evaluation of resources that are necessary to support the sensitive systems at the Central Office and the facilities.
DBHDS should develop a plan to obtain or reallocate funding to hire the necessary resources to maintain the inventory of sensitive systems according to the Security Standard and complete the new governance structure to assist the agency with managing IT applications and systems going forward. Completing these recommendations will help DBHDS to remediate weaknesses in its information security program and help ensure the confidentiality, integrity, and availability of DBHDS’ sensitive data.

**Views of Responsible Officials:**

*Views of responsible officials are in the report related to their agency, which can be found at [www.apa.virginia.gov](http://www.apa.virginia.gov). In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.*

**2019-062: Develop Baseline Configurations for Informations Systems**

**Applicable to:** Department of Behavioral Health and Developmental Services

**Prior Year Finding Number:** 2018-064; 2017-053; 2016-051; 2015-005  
**Type of Finding:** Internal Control and Compliance  
**Severity of Deficiency:** Significant Deficiency

DBHDS does not have documented baseline configurations for their sensitive systems’ hardware and software requirements. DBHDS is working to reduce the total number of sensitive systems but still has 211 sensitive systems, with some containing HIPAA data, social security numbers, and Personal Health Information data. DBHDS was in the process of implementing software that has the ability to establish, configure, and monitor baseline configurations, but the resource implementing it left the agency in September 2018. The agency assigned the work effort to another IT security analyst and planned to complete the implementation in 2019, but due to turnover and competing priorities, DBHDS did not implement the software and there is no estimate when they will complete it.

The Security Standard, Sections CM-2 and CM-2-COV, requires DBHDS to perform the following:

- Develop, document, and maintain a current baseline configuration for information systems. (CM-2)
- Review and update the baseline configurations on an annual basis, when required due to environmental changes, and during information system component installations and upgrades. (CM-2)
- Maintain a baseline configuration for information system development and test environments that is managed separately from the operational baseline configuration. (CM-2)
- Apply more restrictive security configurations for sensitive systems, specifically systems containing HIPAA data. (CM-2-COV)
• Modify individual IT system configurations or baseline security configuration standards, as appropriate, to improve their effectiveness based on the results of vulnerability scanning. (CM-2-COV)

The absence of baseline configurations increases the risk that these systems will not meet the minimum security requirements to protect data from malicious access attempts. Baseline security configurations are essential controls in information technology environments to ensure that systems have appropriate configurations and serve as a basis for implementing or changing existing information systems. If a data breach occurs to a system containing HIPAA data, the agency can incur large penalties, up to $1.5 million.

DBHDS should dedicate the necessary resources and prioritize the installation of the software to establish and maintain security baseline configurations for their sensitive information systems to meet the requirements in the Security Standard. Doing this will help ensure the confidentiality, integrity, and availability of the agency’s sensitive data.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

PLANNING

2019-063: Continue Improving IT Risk Management Program

Applicable to: Department of Social Services

Prior Year Finding Number: 2018-025
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency
CFDA Title and CFDA #: Medicaid Cluster - 93.775, 93.777, 93.778
Federal Award Number and Year: 1905VA5MAP - 2019
Name of Federal Agency: U.S. Department of Health and Human Services
Type of Compliance Requirement - Criteria: Other - 2 C.F.R § 200.303(e)
Known Questioned Costs: $0

Social Services continues to improve its IT Risk Management documentation. Since the prior year audit, Social Services completed its annual test of the Continuity of Operations Plan and four IT System and Data Sensitivity Classifications. However, Social Services does not comply with the following areas:

• Social Services does not have documentation supporting the IT System and Data Sensitivity Classifications for one system (2.5%) out of a total of 40 sensitive systems. The Security
Standard, Section 4, requires Social Services classify the IT system as sensitive if any type of data handled by the system is sensitive based on confidentiality, integrity, or availability.

- Social Services does not have IT System Risk Assessments for three systems (7.5%). The Security Standard, Section 6.2, requires the agency to conduct and document a risk assessment for each IT system classified as sensitive at least once every three years.

- Social Services does not have System Security Plans for two systems (5%). The Security Standard, Section PL-2-COV, requires Social Services document a System Security Plan for the IT system.

- Social Services does not perform annual reviews of its Risk Assessments and System Security Plans to determine the continued validity of the documents. The Security Standard, Section 6.2, requires Social Services conduct an annual self-assessment of the Risk Assessment, and Section PL-2 requires the agency to review the System Security Plans on an annual basis or more frequently to address environmental changes.

- Social Services does not evaluate and implement corrective actions to mitigate risks in its sensitive systems’ Risk Assessments. The Security Standard, Section 6.2.3, requires Social Services to prepare a report of each Risk Assessment that includes major findings and mitigation efforts. Without documenting this information, Social Services cannot determine whether the risks they identify in the risk Assessment and vulnerability scanning processes have the proper mitigating security controls and procedures.

Without documenting risk management information for all its sensitive systems and reviewing the documentation at least annually, Social Services cannot prioritize information security controls to implement or determine if proper information security controls are in place. This could lead to a breach of data or unauthorized access to sensitive and confidential data.

Social Services had a reorganization of executive positions under the Commissioner that included hiring a new Deputy Commissioner of Information Management and Technology. The new Deputy Commissioner of Information Management and Technology was reorganizing the four information technology divisions that report to the new position, which included the divisions of Information Systems, Enterprise Systems, Information Security and Risk Management, and Data Management. Part of the reorganization included a new Risk Manager position that will be responsible for developing and updating Social Services’ IT Risk Management and Contingency Planning documentation. The Deputy Commissioner of Information Management and Technology left the agency in October 2019, putting the reorganization and filling the Risk Manager position on hold.

Social Services should develop a plan and dedicate the necessary resources to complete Risk Management documentation for its sensitive systems and review those documents annually to validate that the information reflects the current environment. Additionally, Social Services should dedicate the necessary resources to implement security controls to mitigate the risks and vulnerabilities identified in
its Risk Assessments. Doing this will help to ensure the confidentiality, integrity, and availability of the agency’s sensitive systems and mission essential functions.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at [www.apa.virginia.gov](http://www.apa.virginia.gov). In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

SYSTEM AND INFORMATION INTEGRITY

2019-064: Mitigate Server Vulnerabilities

Applicable to: Department of Taxation; Virginia Information Technologies Agency

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

VITA’s contractual partnership with various IT service providers (Partnership) provides agencies with installation, maintenance, operation, and support of IT infrastructure components, such as servers, routers, firewalls, and virtual private networks. Taxation relies on the Partnership for the installation of security patches in systems that support Taxation’s operations. During our review, we found that the Partnership is not performing timely security patching in accordance with the Security Standard.

The Security Standard requires the installation of security-relevant software updates within 90 days of release. The Security Standard does allow for varying time periods depending on factors such as the criticality of the update, but generally the Partnership uses a 90-day window from the date of release as its standard for determining timely implementation of security patches (Security Standard section: SI-2 Flaw Remediation).

As of October 2019, the Partnership had not applied a significant number of critical and highly important security patches to Taxation’s server environment, all of which are past the 90-day Security Standard requirement. The systems missing security updates are at an increased risk of cyberattack, exploit, and data breach by malicious parties.

Taxation is working with the Partnership to ensure that all servers have all critical and highly important security patches installed. Additionally, our separate audit of the Commonwealth’s Partnership contract administrator, VITA, will include a contract performance review regarding this risk alert. We anticipate this report will be issued during 2020.
Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at [www.apa.virginia.gov](http://www.apa.virginia.gov). In summary, the views of responsible officials in the agency report do not express a disagreement with the finding. Additionally, we provided management of the Virginia Information Technologies Agency (VITA) with a copy of this finding for their response. VITA’s management elected not to provide a response for inclusion in the audit report.

**RISK ASSESSMENT**

2019-065: Complete a Risk Assessment for Each Sensitive System

Applicable to: Department of Taxation

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

Taxation does not have complete or current risk management documentation for some of its sensitive systems. Specifically, Taxation does not have risk assessments for 19 of 46 (41%) sensitive systems and two of 27 complete (7%) risk assessments are older than three years. In addition, Taxation does not perform annual self-assessments to ensure the continued validity of the risk assessments and does not prepare a report of the risk assessments that identifies the vulnerabilities and an executive summary of major findings and risk mitigation recommendations.

The Security Standard, Section 6.2, requires Taxation to conduct and document a risk assessment of each sensitive IT system, at last once every three years. Additionally, Section 6.2 of the Security Standard requires Taxation to conduct and document an annual self-assessment to determine the continued validity of risk assessments and to prepare a report of each risk assessment that includes identification of all vulnerabilities discovered during the self-assessment and an executive summary, including major findings and risk mitigation recommendations. Further, the Security Standard requires the Information Security Officer (ISO) to review the report.

Taxation had turnover in the department responsible for completing risk assessments and this was the primary factor for not completing risk assessments and annual self-assessments for their sensitive systems.

Without having current and complete risk assessments, Taxation increases the risk they will not detect and mitigate existing weaknesses in sensitive systems. By not detecting the weaknesses, it increases the risk of a malicious user compromising confidential data and impacting the system’s confidential tax data and its availability.
Taxation should ensure there are sufficient resources to complete and update its risk assessments for each sensitive system. In addition, Taxation should maintain oversight of the IT risk assessments by conducting and documenting annual self-assessments.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

MEDIA PROTECTION

2019-066: Improve IT Asset Surplus Process

Applicable to: Virginia Commonwealth University

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

The University’s media sanitization policy does not align with the International Organization for Standardization and the International Electrotechnical Commission information security standard, ISO/IEC 27001 (Security Standard). In addition, the University lacks certain controls to support the information technology asset surplus and data sanitization process.

We identified and communicated this information to management in a separate document marked FOIAE under § 2.2-3705.2 of the Code of Virginia due to it containing specific descriptions of security mechanisms. The Security Standard recommends certain procedures to minimize the risk of data compromise, data accuracy and data loss. The University should dedicate the necessary resources to implement the controls and recommendations discussed in the communication marked FOIAE in accordance with the Security Standard.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.
HUMAN RESOURCES AND PAYROLL

2019-067: Comply with Employment Eligibility Requirements

Applicable to: Department of Behavioral Health and Developmental Services

Prior Year Finding Number: 2018-073
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

Individual facilities within the DBHDS do not have sufficient processes and controls over the employment eligibility process. Employment Eligibility Verification forms (Form I-9) are not completed by the Human Resources Departments (Human Resources) at the facilities in accordance with guidelines issued by the United States Citizenship and Immigration Services of the Department of Homeland Security. During fiscal year 2019, we noted the following:

- Human Resources could not locate Form I-9 for one out of 40 (2.5%) employees tested.
- Human Resources did not fully complete Section 2 of the Form I-9 for 11 out of 40 (27.5%) employees tested.
- Human Resources did not ensure that the employee properly completed Section 1 of Form I-9 for one out of 40 (2.5%) employees tested.
- Human Resources at three out of four (75%) facilities tested and the Central Office did not have written policies and procedures over employment eligibility.

The Immigration Reform and Control Act of 1986 requires that all employees hired after November 6, 1986, have a Form I-9 completed to verify both employment eligibility and identity. The United States Citizenship and Immigration Services sets forth federal requirements for completing the Form I-9 in the Handbook for Employers known as the M-274. Per M-274, the employer is responsible for ensuring all parts of Form I-9 are completed and retained for a period of at least three years from the date of hire or for one year after the employee has separated, whichever is longer. Not complying with federal requirements could result in civil and/or criminal penalties and debarment from government contracts.

The issues listed above occurred because Human Resource staff at the facilities have not received proper training in this area. Further, Human Resources is not performing an adequate review of Form I-9’s to ensure the proper completion of the form. Management should provide adequate training to Human Resources staff to reinforce the expectation of compliance with the applicable federal requirements. Human Resources should perform an adequate review of Form I-9’s completed by staff and employees to ensure accurate completion and compliance with federal requirements. Additionally, Human Resources should develop and implement policies and procedures over employment eligibility.

**Applicable to:** Department of Behavioral Health and Developmental Services

**Prior Year Finding Number:** N/A  
**Type of Finding:** Internal Control  
**Severity of Deficiency:** Significant Deficiency

DBHDS is not reconciling the Commonwealth’s payroll system to the Commonwealth’s accounting and financial reporting systems as part of their post-certification process for payroll. All four of the DBHDS facilities reviewed (100%) and the Central Office did not perform a reconciliation between the two systems during payroll post-certification activities.

Facility and Central Office payroll departments perform a monthly reconciliation of the Commonwealth’s accounting and financial system and the agency’s internal accounting system. The reconciliation shows overall payroll expenses between the systems; however, it does not go into the necessary detail. CAPP Manual Topic 50820 requires a review of payroll expenses recorded in the Commonwealth’s accounting and financial reporting system to ensure that all expenses were recorded correctly. The topic outlines reports that should be included in the review process, which includes reports from both the payroll and accounting and financial reporting systems. An adequate and complete post-certification process ensures payroll expenditure data is accurate and complete. Without reconciling the two systems, DBHDS is unable to ensure that they are charging payroll expenses to the correct programmatic codes. Furthermore, not performing the reconciliation may cause errors or discrepancies in either system to go undetected.

Facilities and the Central Office should implement a process to reconcile the Commonwealth’s payroll and the Commonwealth’s accounting and financial reporting systems as part of their post-certification process for payroll in accordance with the CAPP Manual.

**Views of Responsible Officials:**

Views of responsible officials are in the report related to their agency, which can be found at [www.apa.virginia.gov](http://www.apa.virginia.gov). In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.
2019-069: Improve Controls over Payroll Certifications

Applicable to: Department of Behavioral Health and Developmental Services

Prior Year Finding Number: N/A
Type of Finding: Internal Control
Severity of Deficiency: Significant Deficiency

DBHDS needs to improve controls over payroll certifications. We found that all four facilities tested and the Central Office do not have adequate controls over the payroll certification process. Specifically, we found the following:

- Two facilities and the Central Office (60%) do not have adequate, written policies and procedures over the payroll certification process that are in line with the CAPP Manual.

- One of the four facilities reviewed (25%) is not following internal payroll certification policies and procedures for wage certifications.

- Three of the four facilities (60%) tested did not review all necessary reports during the payroll pre- and post-certification process.

- Two of the four facilities (50%) reviewed do not have an adequate process in place to perform a regular comparison between the Commonwealth’s payroll and human resources systems during post-certification.

- One of the four facilities (20%) reviewed does not have proper separation of duties within the facility’s payroll function.

CAPP Manual Topic 20905 requires that agencies have written policies and procedures separate from the CAPP Manual for all processes. CAPP Manual Topics 50810, 50815, and 50820 outline procedures over the certification process, including pre- and post-certification requirements. CAPP Topics 50810 and 50820 require the review of specified reports from the Commonwealth’s payroll system during payroll pre- and post-certification review respectively. In addition, as a best practice, there should be a separation of duties between all critical parts of the certification process.

DBHDS staff were unaware that procedures should exist separate from the CAPP Manual. The lack of formally documented internal policies and procedures that are customized to reflect the agency’s staffing, organization, and unique operating procedures exposes the agency to unnecessary risk of performing payroll certifications improperly. In addition, written procedures reduce the impact that turnover has on institutional knowledge. The Central Office has not reviewed the Payroll Service Bureau Scope of Services manual since it was last updated in 2016. Without a regular review of this manual, the Central Office may neglect to fulfill responsibilities as outlined by the Payroll Service Bureau.
Many of these exceptions occurred because the individual facilities and the Central Office do not have adequate policies and procedures over the payroll process. In addition, we found in most cases that payroll staff do not review or maintain documentation of reports if no exceptions are found during the certification review.

Facility and Central Office payroll departments should improve existing policies and procedures over the payroll certification process or develop procedures if they do not already exist. Facility and Central Office payroll departments should ensure that applicable staff review all necessary reports throughout the payroll certification process and ensure that these reports are retained as part of the certification file.

**Views of Responsible Officials:**

Views of responsible officials are in the report related to their agency, which can be found at [www.apa.virginia.gov](http://www.apa.virginia.gov). In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

**2019-070: Retain Documentation of Property Collection and Removal of Terminated Employee Badge Access**

**Applicable to:** Department of Behavioral Health and Developmental Services

**Prior Year Finding Number:** N/A  
**Type of Finding:** Internal Control  
**Severity of Deficiency:** Significant Deficiency

Individual facilities within the DBHDS do not have sufficient processes and controls over terminated employees. Two out of four (50%) facilities tested did not have formal termination processes. It should be noted that one of these facilities experienced a significant number of layoffs during the fiscal year. As a result, Human Resources at the facilities were unable to provide documentation confirming the collection of Commonwealth property or timely removal of badge access for all 24 of the terminated employees sampled at those facilities. Further, three facilities do not have internal policies and procedures over the employee termination process, although, one facility uses a termination checklist during the termination process.

CAPP Manual Topic 50320 recommends agencies develop a termination check-off list to complete as part of the termination process, to include the collection of outstanding uniforms, badges, keys, etc. Per CAPP Manual Topic 20905, agencies should develop internal policies and procedures aside from the CAPP Manual over all critical areas. DBHDS experienced significant turnover during the period under review, as evidenced by the fact that DBHDS employs over 6,000 employees and had over 1,700 separations during this period. Without proper and sufficient internal controls over terminated employees that ensure the return of Commonwealth property and removal of all access privileges, individual facilities are increasing the risk that terminated employees may retain physical access to
Commonwealth property and unauthorized access to state systems and sensitive information. For DBHDS, the exposure to risk is further increased due to the secure nature of the individual facilities.

These issues occurred because the individual facilities have not developed and implemented policies and procedures over the termination process. Individual facilities stated that they place reliance on the Human Resource Management termination procedures. Alternatively, facilities are unaware that separate written procedures are required. One facility used a termination checklist in the past, but is no longer using it during terminations. Further, facilities rely on verbal communications with employees to collect property. In addition, the Security Department is responsible for removing badge access; however, they do not retain evidence of the badge deactivation.

Management across all DBHDS facilities, not just those reviewed, should ensure that adequate processes and controls are in place over terminated employees. Individual facilities should develop and implement more effective termination processes to ensure the collection of Commonwealth property and the timely removal of badge access for terminated employees. Additionally, facility staff should retain documentation of terminations. Facilities should develop policies and procedures over the termination process and/or create a termination checklist if they do not already exist.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-071: Ensure Terminated Employees Are Properly Classified in the Payroll System

Applicable to: Department of Behavioral Health and Developmental Services

Prior Year Finding Number: N/A
Type of Finding: Internal Control
Severity of Deficiency: Significant Deficiency

Individual facilities within the DBHDS did not change the employment status for six terminated or inactive employees in the Commonwealth’s payroll system. Four out of six (67%) terminated or inactive employees did not receive any compensation during the 2018 calendar year but remained “active” in the system after January 2019. Two out of ten (20%) employees identified that received their final paychecks remained “active” in the Commonwealth’s payroll system after being terminated.

CAPP Manual Topic 50320 states that agencies must verify that information in the Commonwealth’s payroll system concerning terminated employees is complete, properly authorized, and entered accurately into the system. Employees remaining active in the payroll system after being terminated and having received final paychecks pose a risk for improper payments.
The facilities did not properly identify and update the statuses of these employees due to a lack of management oversight. In addition, facility staff reactivated several employees in the Commonwealth’s payroll system during the fiscal year in order to update their Federal Insurance Contributions Act statuses; however, staff did not change these employees back to an “inactive” status once changes were made. The facility recognized that more instances of this potentially exist and have since begun to correct this misclassification.

Facilities should ensure terminated or inactive employees are properly classified in the Commonwealth’s payroll system. Facilities should regularly complete a review of employment statuses to ensure employees terminated in the human resources system are removed from the Commonwealth’s payroll system after final pay is made to the employee.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-072: Properly Approve and Monitor Administrative Employee Overtime

Applicable to: Department of Behavioral Health and Developmental Services

Prior Year Finding Number: N/A
Type of Finding: Internal Control
Severity of Deficiency: Significant Deficiency

DBHDS should improve controls over employee overtime. During our review, we found that employees in administrative positions at two DBHDS facilities worked an excessive amount of overtime during the fiscal year that was not properly approved or was not reasonable in relation to job responsibilities. Specifically, two out of 18 (11%) employees tested worked overtime hours that was not properly approved, and one out of 18 (6%) employees tested worked overtime that is unreasonable in relation to the employee’s responsibilities.

One of the facilities had a large increase in employee turnover during the fiscal year, and the lack of staff required existing staff to take on additional workload and overtime. Management at the second facility approved an administrative employee to work overtime because there was a misunderstanding of the employee’s job roles and responsibilities. The Human Resource Management Policy 1.25, Hours of Work, states that non-exempt employees must not work additional hours that have not been authorized by management.

DBHDS facilities should improve controls over employee overtime by properly approving and monitoring administrative employee overtime hours. DBHDS should develop processes for monitoring and tracking hours for wage employees in administrative positions. Payroll departments should clarify with managers that overtime must be properly approved and reasonable in relation to employee job
responsibilities. When possible, DBHDS should allocate additional staff as needed to mitigate excessive overtime hours on existing staff.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-073: Strengthen the Employee Off-Boarding Process

Applicable to: Department of Health

Prior Year Finding Number: N/A
Type of Finding: Internal Control
Severity of Deficiency: Significant Deficiency

Health did not correctly complete their off-boarding procedures for employees who separated from the agency. Health underpaid an employee for their annual leave payout and did not detect this error. In addition, Health discontinued paying two employees who terminated their employment, but did not remove them from the Commonwealth’s payroll system for an entire year following their separations.

As a result of an error in the leave payout calculation, Health underpaid an employee $2,067 in the employee’s final paycheck and had to issue a corrected check. Additionally, not reporting employees as terminated in the payroll system led to the two employees remaining in the system throughout the fiscal year. Although Health discontinued paying these employees, leaving them in the payroll system increases the risk of accidentally paying the employees after termination. CAPP Manual Topic 50320 states that agencies must verify that the Commonwealth’s payroll system information concerning terminating employees is complete, properly authorized, and entered accurately into the system.

Health does not have a review process in place to ensure the Payroll Department correctly completes each of its required off-boarding tasks. Additionally, each of these issues came at a time when Health experienced turnover and a high volume of transactions in the department. Resource strain and the lack of a review process contributed to Health reporting inaccurate and incomplete information to the payroll system.

Health should implement a review process of employee off-boarding documents to ensure all amounts keyed agree to the approved supporting documentation. This review process should also cover each step of the employee off-boarding process to ensure payroll analysts enter all terminations completely and accurately into the payroll system. This will reduce the risk of incorrectly paying terminated employees.
Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-074: Enhance the Overtime Reporting Process

Applicable to: Department of Health

Prior Year Finding Number: N/A
Type of Finding: Internal Control
Severity of Deficiency: Significant Deficiency

Health paid one of its employees an incorrect amount of overtime pay and did not pay the overtime until over a month after the employee worked the overtime hours. This resulted in an overpayment of $4,889, which was not detected until the employee reported this issue to management.

CAPP Manual Topic 50505 requires agencies to properly complete and authorize all source documents used to pay employees. This ensures accurate entry into the payroll system. When a classified employee works overtime, Health requires managers to complete a “Classified Employee Overtime Form” (overtime form). This form requires the total number and type of overtime hours worked. The signing of this form serves as the certification that the employee worked the number of hours listed on the form.

As a result of the incorrect completion of this form, Health paid an employee an incorrect amount of overtime pay. The employee’s pay and associated tax withholdings and records required correction in a subsequent paycheck after the employee reported this error to management.

Work unit staff incorrectly entered the employee’s hours worked causing the error. Although the Payroll Department questioned the amount as unusual and provided guidance on the proper way to complete the form, management of the work unit did not provide a revised form prior to processing the payroll. Management of the business unit’s confusion on how to properly complete the form led to the delay in providing the approved overtime hours to the Payroll Department until three pay periods after the employee worked the overtime.

Health should provide guidance on how to use the overtime form and clarify that managers should only enter the overtime hours worked as opposed to the total hours worked. In addition, Health should require that managers provide this information to the Payroll Department prior to the end of the following pay period for timely processing. This will reduce the risk of overpayments to salaried or classified employees who work overtime and will ensure timeliness of overtime payments to employees.
Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-075: Develop and Implement Policy for Monitoring Part-time Employee Hours

Applicable to: Department of Health

Prior Year Finding Number: 2018-078
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

Health does not adequately ensure part-time employees work less than an average of 29 hours per week, which equates to a total of 1,508 hours annually. For the look-back period from May 1, 2018, through April 30, 2019, Health had six part-time employees who averaged greater than 29 hours per week and, therefore, exceeded the 1,508-hour limit. Health has developed procedures to generate monthly monitoring reports and to notify departmental managers of part-time employees approaching 1,500 hours annually. However, Health should strengthen these procedures to require limiting the employees’ hours after the Payroll Department sends out these notifications.

The Affordable Care Act requires certain employers to provide health care benefits to all full-time employees who work a weekly average of 29 hours or more. Additionally, Chapter 854 § 4-7.01g of the 2019 Virginia Acts of Assembly states that part-time Commonwealth employees may not work more than 29 hours per week on average over a twelve-month period. Health’s internal procedures require the Payroll Department to send out warnings to managers advising that their employees are approaching 1,500 hours to prevent non-compliance with the state and federal regulations.

When the agency has part-time employees working the equivalent of full-time jobs without full-time job benefits, it could create the appearance of unequal treatment for those employees and could create future liabilities for the agency. By allowing a part-time employee to work more than an average of 29 hours per week for a year, Health is out of compliance with federal and state regulations and can be subject to penalties or even incur the costs of providing benefits to part-time employees.

Although the Payroll Department sent out warnings to managers indicating their employees were approaching the 1,500-hour limit outlined in the Payroll Department’s procedures, management did not take action to limit the quantity of hours worked after this notification. Additionally, there are no specific actions outlined in Health’s procedures that require the responsible supervisors to ensure compliance with the 1,500-hour rule.

Health should strengthen policies and procedures related to the monitoring of part-time hours. Health should document and implement a procedure specifically requiring managers to take action after reviewing the monitoring reports generated by the Payroll Department. Health’s district managers
should maintain an awareness of their part-time employees’ total hours worked and reduce their hours as they approach the yearly limit. This will help to ensure compliance with the Affordable Care Act and the Virginia Acts of Assembly.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-076: Improve Timesheet Approval Process

Applicable to: University of Virginia-Academic Division

Prior Year Finding Number: N/A
Type of Finding: Internal Control
Severity of Deficiency: Significant Deficiency

The Academic Division does not have adequate timesheet controls to support the reasonableness of hourly employee pay. Currently, the Payroll department instructs supervisors to approve timesheets for their direct report employees prior to each payroll run. However, if supervisors do not approve timesheets by the deadline, an automated payroll system process completes the approval of all unapproved timesheets. The Payroll department then notifies the supervisors of the mass approval of timesheets for their direct report employees and gives them 30 days to make corrections to time. The Academic Division does not require supervisors to review the time or to provide positive confirmation that the submitted time is accurate.

When supervisors rely on the mass approval process, the risk of employees charging fraudulent or erroneous time increases. Supervisor reliance on the mass approval process is a result of the absence of policies and procedures surrounding supervisor approvals and a lack of accountability on behalf of department supervisors.

The Academic Division should develop and implement a formal policy to emphasize timely timesheet approval prior to each pay run to ensure reasonableness and accuracy of hourly employee payroll. In instances where the approving supervisor cannot approve a timesheet in a timely manner, the Academic Division should designate a backup approver. When neither approver is available to approve timesheets prior to the Payroll department’s processing of payroll, the Payroll department should require each supervisor to provide subsequent positive confirmation of the reasonableness of the hours paid. Finally, management should develop a mechanism for monitoring those supervisors consistently relying on the mass approval process and implement a system of follow up to ensure the supervisors understand their responsibility for timely approval of timesheets.
Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at [www.apa.virginia.gov](http://www.apa.virginia.gov). In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-077: Implement Internal Controls to Terminate Benefits for Employees Convicted of a Felony

**Applicable to:** Department of Motor Vehicles

**Prior Year Finding Number:** N/A  
**Type of Finding:** Internal Control and Compliance  
**Severity of Deficiency:** Significant Deficiency

Motor Vehicles has not designed, implemented, or documented internal controls to identify when it is necessary to initiate the benefits forfeiture process against an employee who is convicted of a felony in relation to his/her employment. One former employee was convicted of a felony associated with the employee’s job responsibilities at Motor Vehicles during the fiscal year. Management did not initiate the process of terminating the individual’s benefits with the Virginia Retirement System (Retirement System) until four months after the conviction date.

Section 51.1-124.13 of the Code of Virginia requires the forfeiture of all pension and related benefits if a state employee is convicted of a felony associated with the performance of the employee’s job and the person’s employer determines that the felony arose from misconduct in a covered position on or after July 1, 2011. To aid agencies in meeting this requirement, the Retirement System created a form known as the VRS-180 form. This form contains background information and steps an agency can take to meet the requirements of the Code of Virginia. Without adequately designing and implementing internal controls over this process, an individual convicted of a qualifying felony may be able to obtain benefits through the Retirement System.

Management asserts that Motor Vehicles’ lack of experience in completing this process is the reason why there is no control for making the required notification and using the VRS-180 form. In addition, there was confusion between Motor Vehicles’ Human Resources and Law Enforcement divisions as to which division was responsible for initiating this process.

To implement internal controls, management should establish a process that identifies when it is necessary to initiate the benefits forfeiture process in accordance with the Code of Virginia. Furthermore, management should clarify who is responsible for the implementation of these controls. Once management has designed and implemented adequate internal controls, management should ensure these controls are adequately documented within policies and procedures.
Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

RETIRED SYSTEM MEMBER DATA


Applicable to: Department of Behavioral Health and Developmental Services

Prior Year Finding Number: 2018-083; 2017-077; 2016-068; 2015-081; 2014-063

Type of Finding: Internal Control

Severity of Deficiency: Significant Deficiency

Individual facilities within the DBHDS and the Central Office did not adequately perform and document reconciliations between the Commonwealth’s human resource and retirement benefits systems during fiscal year 2019. Specifically, we noted the following:

- The Central Office did not perform a reconciliation of the credible compensation between the Commonwealth’s human resource and retirement benefits systems prior to confirming the contribution.

- Three of the four facilities tested (75%) did not maintain documentation to support correction of all non-creditable compensation data discrepancies prior to confirming the contribution.

- One of four facilities tested (25%) did not clear exceptions identified on the Commonwealth’s human resource system cancelled records reports in a timely manner.

- The Central Office and three of the four facilities tested (75%) are not confirming the contribution snapshot within the required timeframe.

- The Central Office and three of the four facilities (75%) tested only reviewed the cancelled record report monthly and could not provide adequate justification for their deviation from the CAPP Manual guidance.

CAPP Manual Topic 50410 requires a daily review of the human resource system cancelled record report. Reviewing and correcting items in the cancelled record report ensures retirement benefits are accurately calculated and properly transmitted between the human resource and benefits systems.

Additionally, CAPP Manual Topic 50410 states that agencies should perform a reconciliation of creditable compensation between the Commonwealth’s human resource and retirement benefits
systems monthly before confirming the contribution. Improper reconciliation processes can affect the integrity of the information in the Commonwealth’s retirement benefits system that determines pension liability calculations for the entire Commonwealth. Since the VRS actuary uses retirement benefits system data to calculate the Commonwealth’s pension liabilities, inaccurate data could result in a misstatement in the Commonwealth’s financial statements.

In accordance with the Contribution Confirmation and Payment Scheduling VRS Employer Manual, all employers are required to submit the contribution snapshot for the month by the 10th of the following month. Not reviewing or reconciling the contribution snapshot prior to confirmation deadline can result in incorrect payroll deductions and retroactive collections.

Individual facilities staff were unsure of how to perform several components of the reconciliation process; therefore, they did not properly perform pieces of the reconciliation process during the fiscal year. Due to turnover, staff did not retain sufficient documentation that the reconciliation to the Commonwealth’s retirement benefits system occurred. Additionally, due to the lack of understanding of documentation requirements, staff did not maintain documentation showing the clearing of all exceptions. Human Resources at the Central Office was unaware of the requirement to reconcile the human resources and benefits systems prior to confirming the monthly contribution. In addition, current written procedures do not include the reconciliation of the human resources and benefits systems. Human Resources staff at the Central Office are in the process of updating procedures over the reconciliation to be distributed agency wide.

Management should ensure that staff perform and document monthly reconciliations between the Commonwealth’s human resource and retirement benefits systems. Staff should clear exceptions noted in the Commonwealth’s human resource system cancelled record report timely. When clearing exceptions, staff should document the reason for the exception and the remediation activities performed. Management should implement corrective action to ensure that the contribution snapshot is confirmed by the 10th of the following month. Additionally, management at the Central Office should ensure that policies and procedures include all necessary requirements for performing a reconciliation of the Commonwealth’s human resources and benefits systems. Policies should include sufficient justification for any deviation from CAPP Manual requirements.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.
2019-079: Improve Documentation and Timeliness of Retirement Benefits System Reconciliations

Applicable to: Department of Corrections-Central Administration

Prior Year Finding Number: 2018-084
Type of Finding: Internal Control
Severity of Deficiency: Significant Deficiency

During the fiscal year 2018 audit, we determined that the Department of Corrections (Corrections) was not adequately documenting reconciliations between the Commonwealth’s human resources system and the Commonwealth’s retirement benefits system. Additionally, as part of the reconciliation between these two systems, Corrections was not confirming the contribution snapshot within the required timeframe.

As of our report date, Corrections had implemented corrective actions with respect to this previously reported finding, but had not completely implemented all corrective actions.

Corrections should continue to improve policies and procedures to strengthen internal controls and oversight over this process. Corrections should ensure the reconciliation’s adequate and timely completion. In addition, Corrections should consider designing and implementing more centralized procedures over this process.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-080: Perform Monthly Reconciliations of the Payroll and Retirement Systems

Applicable to: Department of Health

Prior Year Finding Number: N/A
Type of Finding: Internal Control
Severity of Deficiency: Significant Deficiency

Health has not performed monthly reconciliation procedures for the retirement benefits system since October of 2018. There are five automated reports, which show reconciling items between the payroll system and the retirement benefits system. These monthly reports ensure Health withholds the correct amounts from employees’ paychecks and remits the correct amounts to VRS.

According to CAPP Manual Topic 50410, “exception items on automated VRS reconciliation reports should be identified and communicated to the proper system of authority for correction as soon as possible, but no later than 31 days from the date of the report.” This same section of the CAPP Manual
also requires agencies to “ensure that a timely review of the monthly reconciliation reports is performed and that any automated transfers are accurate or correcting actions are completed.” Additionally, the Contribution Confirmation Section of the VRS Employer Manual states “…the employer should review and reconcile amounts in the retirement benefits system to the information in the payroll system.” The lack of a reconciliation between the payroll system and the retirement benefits system also represents a violation of Health’s internal policies and procedures.

Without performing reviews of monthly reconciliation reports, Health does not know if there are discrepancies between the payroll system and the retirement benefits system to report. The lack of a monthly review prevents Health from being able to identify and resolve reconciling items between the payroll system and the retirement benefits system. This could cause an improper deduction from an employee’s paycheck or an incorrect remittance to VRS on an employee’s behalf. Additionally, since the VRS actuary uses the retirement benefits system data to calculate the Commonwealth’s pension liabilities, inaccurate data due to unresolved exceptions could result in a misstatement in the Commonwealth’s financial statements.

Employee turnover in the Payroll Department caused Health to stop performing monthly reviews of the reconciliations due to the prioritization of other critical payroll tasks. Health recently hired an additional employee for the Payroll Department and provided training on these reconciliations. Health should continue to resolve the backlog of reviews and report any reconciling items for resolution. In addition, Health should provide cross-training and designate a backup person to perform this task in the future to prevent gaps in performance in the event of future turnover.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-081: Ensure Completion of the Commonwealth’s Retirement Benefits System Reconciliation Process

Applicable to: University of Virginia

Prior Year Finding Number: N/A
Type of Finding: Internal Control
Severity of Deficiency: Significant Deficiency

The University Human Resources Office (HR) is not completing a reconciliation of the University’s payroll and human resources system to the Commonwealth’s retirement benefits system (benefits system). HR did not perform a reconciliation for ten out of 12 months in fiscal year 2019 (83%), and performed its last full reconciliation during August 2018. For 26 employees tested for pay rate changes, 20 (77%) had incorrect pay date changes in the Commonwealth’s retirement benefits system, which an effective reconciliation may have detected and corrected.
Commonwealth Accounting Policy and Procedure Manual Topic 50410, Virginia Retirement System and Optional Retirement Plans, states that agencies should submit their snapshot confirmation to the Virginia Retirement System (VRS) that confirms their retirement benefits information is accurate in the benefits system by the tenth of the month following the snapshot month. The VRS Employer Manual states that before confirming the snapshot, the employer must review and reconcile the snapshot to ensure the employer reports the most accurate data. Not performing the required reconciliations prior to confirming the snapshot can lead to incorrect information in the benefits system that determines pension liability calculations for the Commonwealth. Since the VRS actuary uses benefits system data to calculate the Commonwealth’s pension and other postemployment benefit liabilities, inaccurate data could result in a misstatement in the Commonwealth’s financial statements, and consequently the portion of the collective liability VRS allocates to the University.

The University implemented a new payroll and human resources system in January 2019, which required significant personnel resources to implement. Due to the allocation of these resources to development of the new system, HR deferred performing the required reconciliations. With the completion of the new system implementation, HR should allocate sufficient resources to ensure the proper and timely completion of the reconciliation of the University’s human resources information to the benefits system managed by VRS.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-082: Improve Internal Controls for Reviewing Exceptions in the Commonwealth’s Retirement System

Applicable to: Department of Motor Vehicles

Prior Year Finding Number: N/A
Type of Finding: Internal Control
Severity of Deficiency: Significant Deficiency

Motor Vehicles’ Human Resources is not reviewing and addressing items on the retirement system’s automated reconciliations (automated reconciliations). The automated reconciliations compare information in the retirement system to other sources and reports exceptions. CAPP Manual Topic 50410, pages 33-38, describe each of the automated reconciliations and the actions agencies should take to resolve exceptions. This topic also states that the agency should maintain any supporting documentation of its reconciliations for audit purposes. Without reviewing the automated reconciliations, Motor Vehicles cannot ensure that amounts are accurate or correcting actions are completed.
According to management, there are several contributing factors negatively impacting its ability to review the automated reconciliations. Turnover in Human Resources is the primary factor, which is compounded by a lack of adequately documented policies and procedures and overall understanding of what is required to ensure this control is operating as intended. Additionally, Human Resources is not obtaining the necessary automated reconciliations timely from its payroll service provider in order to complete its review and any correcting actions.

To improve internal controls, management should determine which staff will be responsible for completing the control of reviewing the automated reconciliations. In addition, Human Resource staff should attend training to obtain a better understanding of the processes required by the CAPP Manual and ensure that these controls are well documented within internal policies and procedures. Lastly, management should work with the Motor Vehicles’ payroll service provider to ensure Human Resource staff is receiving the automated reconciliation reports in a timely manner.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

STATEMENT OF ECONOMIC INTERESTS

2019-083: Ensure Employees Complete Required Conflict of Interest Training

Applicable to: Department of Medical Assistance Services

Prior Year Finding Number: 2018-081; 2017-081
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency
CFDA Title and CFDA #: Medicaid Cluster - 93.775, 93.777, 93.778
Federal Award Number and Year: 1805VA5MAP - 2019
Name of Federal Agency: U.S. Department of Health and Human Services
Type of Compliance Requirement - Criteria: Procurement and Suspension and Debarment - 2 C.F.R. § 200.317

Known Questioned Costs: $0

Medical Assistance Services did not ensure employees completed the required Conflict of Interest training within the timeframe outlined in the Code of Virginia. Specifically, 15 out of 138 (11%) employees who hold positions of trust did not complete the Conflict of Interest training within the required timeframe.

Pursuant to Code of Virginia § 2.2-3128 through § 2.2-3131, each state filer shall attend the orientation course within two months after he or she becomes a state filer and at least once during each consecutive period of two calendar years commencing on the first odd-numbered year thereafter. In
addition, the Code of Virginia § 2.2-3129 requires agencies to keep a record of attendance that includes the specific attendees, each attendee’s job title, and the dates of attendance for a period of not less than five years after each course is given.

Medical Assistance Services could be susceptible to actual or perceived conflicts of interest that would impair or appear to impair the objectivity of certain decisions made by employees in positions of trust. Additionally, not completing the Conflict of Interest orientation course may prevent Medical Assistance Services employees from recognizing or properly disclosing a conflict of interest.

Although the Human Resources Division has policies and procedures to guide management through the process of identifying employees for whom these requirements would be applicable, they had difficulties monitoring employees and holding them accountable for compliance with Conflict of Interest requirements due to the manual process. Medical Assistance Services is in the process of modifying the policies and procedures to require all state filers within the agency to complete the training every January, which will help the Human Resources division monitor employees who have not completed the training.

The Human Resources Division should ensure compliance with its internal policy and the Code of Virginia by monitoring all employees designated in a position of trust to ensure they complete the required Conflict of Interest training within two months of becoming a filer and once within each consecutive period of two calendar years thereafter. The Human Resources Division should also maintain a record of such attendance.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-084: Ensure Compliance with Conflict of Interests Act

Applicable to: Department of Social Services

Prior Year Finding Number: 2018-082; 2017-082
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

Human Resources did not properly identify all employees and board members holding a position of trust, to ensure required disclosures were properly filed. Additionally, Human Resources did not ensure all employees in a position of trust completed the required Conflict of Interests Act (COIA) training timely. Our review identified the following:

- Human Resources did not identify two employees within Procurement as needing to file disclosures.
• Human Resources did not identify eight board members as needing to file disclosures.

• Seven out of 24 (29%) employees identified by Human Resources within a position of trust did not complete COIA training within two months of their hire date.

Per the Code of Virginia § 2.2-3114, persons occupying positions of trust within state government or non-salaried citizen members of policy and supervisory boards shall file a disclosure statement with the Commonwealth’s Ethics Advisory Council annually. Additionally, per Executive Order Number Eight (2018), positions of trust for Executive Branch Agencies include, but are not limited to, Chief Procurement Officers and other positions with the ability to authorize and make contract and procurement decisions. The Code of Virginia § 2.2-3128 through § 2.2-3131 requires that each employee within a position of trust complete COIA training within two months of their hire date and at least once every two years after the initial training. This training is designed to help employees recognize potential conflicts of interest. The Commonwealth offers in-person and web-based training, which satisfies this requirement.

Without appropriately identifying positions of trust and ensuring those employees are completing the required training, Social Services could be susceptible to actual or perceived conflicts of interest and may be limited in its ability to hold its employees accountable for not knowing how to recognize a conflict of interest and how to resolve it. Additionally, employees and board members could be subject to penalties for inadequate disclosure on their filings, as outlined within the Code of Virginia § 2.2-3120 through § 2.2-3127. Human Resources updated their policies and procedures to meet Code of Virginia requirements for the COIA training; however, Human Resources misinterpreted the training requirement under the Code of Virginia and employees were provided incorrect instructions for completing the training within two months of hire date.

Human Resources should ensure employees within a position of trust and board members are appropriately identified and are provided adequate instruction and notice to maintain compliance with the COIA. Additionally, Human Resources should ensure that policies and procedures are updated to reflect current Code of Virginia requirements and the guidance issued by the Commonwealth’s Ethics Advisory Council.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.
2019-085: **Comply with the Conflicts of Interest Act**

**Applicable to:** Department of Health  
**Prior Year Finding Number:** N/A  
**Type of Finding:** Internal Control and Compliance  
**Severity of Deficiency:** Significant Deficiency

Health did not require all employees designated as occupying positions of trust to complete the required Statement of Economic Interest (SOEI) training within the required timeframe. Pursuant to the Code of Virginia § 2.2-3130 (Conflicts of Interest Act), SOEI filers must complete orientation training to help them recognize potential conflicts of interest. Employees in positions of trust must complete this training within two months of hire and at least once during each consecutive period of two calendar years.

Thirty-four of 70 (48.6%) employees designated as required filers did not complete the training. By not ensuring that all required employees have completed the necessary training, Health may not be able to rely on its employees to effectively recognize, disclose, and resolve conflicts of interest.

Health’s Shared Administrative Services (SAS) did not adequately monitor employees or hold them accountable for compliance with SOEI training requirements. Health relies on an automated notification system to inform new and existing employees when they must complete certain required trainings and provides them with deadlines for completion. SAS did not properly include the SOEI Orientation within these notifications.

SAS should monitor all employees designated in positions of trust to ensure they complete the required SOEI training once within each consecutive period of two calendar years. SAS should update the notification system to include the SOEI Orientation and all other required trainings. This will reduce the rate of non-compliance with the Conflicts of Interest Act and reduce the risk of improper or incomplete conflicts disclosure.

**Views of Responsible Officials:**

Views of responsible officials are in the report related to their agency, which can be found at [www.apa.virginia.gov](http://www.apa.virginia.gov). In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.
2019-086: Develop Policies and Procedures to Ensure Compliance with Conflict of Interest Act Requirements

Applicable to: University of Virginia

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

The University’s Department of Policy, Risk Management, and Compliance (Policy, Risk Management, and Compliance) does not properly ensure that all individuals in positions of trust file Statement of Economic Interest (SOEI) forms as a condition of assuming employment, and does not maintain adequate internal records to monitor and ensure employees have completed the ethics and conflict of interest training within each rolling two-year period as required by the Code of Virginia. Policy, Risk Management, and Compliance identifies and instructs filers to file only during the annual filing period, regardless of their hire date. Additionally, 313 of 567 filers (55%) have not completed training in the past two years. Policy, Risk Management, and Compliance reviews compliance with training requirements on an annual basis and relies solely on the training records provided and maintained by the Virginia Conflict of Interest and Ethics Advisory Council (the Council), which may be an incomplete listing of training taken by University filers due to the other acceptable trainings that a filer may complete outside of the Council’s training process.

Pursuant to the Code of Virginia § 2.2-3114A and § 2.2-3118.2, persons occupying positions of trust within state government shall file with the Council, as a condition to assuming office or employment, a disclosure statement of their personal interests and such other information as is required on the form, on or before the day such office or position of employment is assumed, and thereafter shall file such a statement annually on or before February 1. The Governor of Virginia’s Executive Order Number Eight (2018) indicates positions of trust for institutions of higher education include Presidents, Vice Presidents, Provosts, Deans, and any other person as designated by the institution including those persons with approval authority over contracts or audits. Additionally, Code of Virginia § 2.2-3129 and § 2.2-3130 require employees in a position of trust to complete an ethics and conflict of interest course, initially within two months of hire, and thereafter on a biennial basis. Code of Virginia § 2.2-3129 requires agencies to maintain the training records for a period of not less than five years to confirm that employees have completed the course as required.

Policy, Risk Management, and Compliance does not have adequate policies and procedures in place to ensure compliance with the Act. By not ensuring that individuals in positions of trust file SOEI forms as a condition of assuming employment, the University could be susceptible to actual or perceived conflicts of interest that would impair or appear to impair the objectivity of certain programmatic or fiscal decisions made by employees in designated positions of trust. While not a cost to the University itself, employees in a position of trust who do not complete the required Statement of Economic Interest form may, as allowed by the Code of Virginia § 2.2-3124, be assessed a civil penalty in an amount equal to $250.
Policy, Risk Management, and Compliance should develop, implement, and maintain written policies and procedures to meet the Code of Virginia requirements for the SOEI. These updated policies should assist in identifying positions of trust and develop processes to ensure that the appropriate individuals submit SOEI forms as a condition of assuming their employment and each January thereafter. In addition, Policy, Risk Management, and Compliance is responsible for developing and maintaining a filer listing with training records for no less than the preceding five years. Using this internal record, Policy, Risk Management, and Compliance should ensure that filers are informed of their initial training requirement and their biennial training thereafter, and should update the record upon the filer’s completion of training.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-087: Improve the Process to Identify Individuals in a Position of Trust

Applicable to: Virginia Polytechnic Inst. and State University

Prior Year Finding Number: N/A
Type of Finding: Compliance
Severity of Deficiency: Not Applicable

Virginia Polytechnic Institute and State University (Virginia Tech) is not properly identifying and tracking individuals in a position of trust, to ensure such individuals complete the Statement of Economic Interest (SOEI) requirements. Virginia Tech did not identify seven individuals in a position of trust that had approval over contracts or audit. In addition, 28 individuals identified in a position of trust did not complete the required training, and seven individuals on Virginia Tech’s filer list did not file the SOEI disclosure form.

Executive Order Number Eight (2018) requires Virginia Tech to submit a report to the Office of the Secretary of the Commonwealth identifying, by name and job title, the positions that are required to file a SOEI form. Additionally, per the Executive Order, positions of trust for institutions of higher education include presidents, vice presidents, provosts, deans, and any other person as designated by the institution including those persons with approval authority over contracts or audits. The Executive Order also requires that the head of each agency, institution, board, commission, council, and authority within the Executive Branch to be responsible for ensuring that designated officers and employees file their statements of economic interests in accordance with § 2.2-3114 of the Code of Virginia. Section 2.2-3130 of the Code of Virginia requires individuals in a position of trust to receive training within two months upon hire and every two years thereafter.

By not identifying and tracking all individuals in a position of trust, Virginia Tech cannot ensure that these individuals are filing a SOEI form as required. Unidentified individuals that should have filed
may be unable to recognize a conflict of interest or unable to resolve the conflict due to the lack of the required training. Virginia Tech increases their risk for fraud and possible lawsuits involving the respective employees. Additionally, employees in a position of trust who do not complete the required SOEI form may, as stated by the Code of Virginia § 2.2-3124, be subject to a $250 civil penalty.

The current controls related to the identification of positions of trust in Virginia Tech’s Human Resources system did not adequately identify all potential job positions that should require the employee to file an SOEI form and complete the required training because the process did not consider part time employees. In addition, there has been turnover within the SOEI program coordinator position, which resulted in miscommunication in both documentation and tracking.

Virginia Tech should modify existing procedures or implement additional procedures to ensure that the SOEI program coordinator identifies employees in positions of trust upon hire or change in employee job responsibilities to include part time employees. They should also ensure that an adequate tracking mechanism exists to ensure filers are completing their required training.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

OTHER GRANTS MANAGEMENT

2019-088: Improve Controls over the Income Verification for the TANF Program

Applicable to: Department of Social Services

Prior Year Finding Number: 2018-087
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency
CFDA Title and CFDA #: TANF Cluster - 93.558
Federal Award Number and Year: 1901VATANF - 2019
Name of Federal Agency: U.S. Department of Health and Human Services
Known Questioned Costs: $0

Social Services is still working on implementing a control to ensure the Income Eligibility and Verification System (IEVS) is used when determining eligibility for TANF participants. 45 C.F.R. § 205.55 requires agencies to collect income information through IEVS. By not ensuring that IEVS is used when verifying income for TANF participants, Social Services cannot verify that participants in the TANF program have met all eligibility requirements.
Social Services submitted a change request to Enterprise Systems to design and implement a defined process for working the IEVS matches. The design for the new process for IEVS has been completed; however, it has not been implemented and is planned for implementation in calendar year 2020.

Social Services should continue implementation of the new IEVS process for local agencies processing TANF applications in order to utilize IEVS for verifying income. In addition, Social Services should implement a control to ensure that IEVS is utilized when determining eligibility for TANF.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-089: Improve Controls over SNAP Federal Reporting

Applicable to: Department of Social Services

Prior Year Finding Number: 2018-091
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

Finance does not have adequate controls in place to ensure accurate federal quarterly reporting on the FNS-209 “Status of Claims Against Households” Report (FNS-209). Two FNS-209 reports reviewed identified the following:

- For one FNS-209 quarterly report, Finance could not provide documentation from the case management system to validate all the line items reported.
- For one FNS-209 quarterly report, Finance could not provide documentation from the case management system validating the beginning and ending balance line items.

7 C.F.R. § 273.18 (m) requires agencies to maintain a system for monitoring recipient claims against households that maintains claims records and corresponding receivable information. The system must also be able to produce summary reports and reconcile to supporting records. Reporting potentially inaccurate or incomplete information prevents the United States Department of Agriculture, Food and Nutrition Service from adequately monitoring the status of claims against households.

Finance and Enterprise Systems have been working to address the system deficiencies in the case management system to ensure FNS-209 can be adequately supported; however, the beginning and ending balances reported on the FNS-209 report do not agree to the case management system. When Enterprise Systems performs a data fix to the case management system, it will alter the amounts in the
system and any previously submitted FNS-209 reports are no longer adequately supported. In addition, Social Services does not have sufficient policies and procedures over the FNS-209 reporting process.

Finance and Enterprise Systems should continue to work together to ensure all information submitted in the FNS-209 can be sufficiently validated. Finance should create policies and procedures over the reporting process to ensure accurate reporting of claims against households.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-090: Ensure Subrecipient Reviews Adhere to Monitoring Plan

Applicable to: Department of Social Services

Prior Year Finding Number: 2018-093
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency
CFDA Title and CFDA #: Community Services Block Grant - 93.569; Foster Care Title IV-E - 93.658; Adoption Assistance - 93.659; Social Services Block Grant - 93.667; Medicaid Cluster - 93.775, 93.777, 93.778; TANF Cluster - 93.558
Federal Award Number and Year: Various - 2019
Name of Federal Agency: U.S. Department of Health and Human Services
Type of Compliance Requirement - Criteria: Subrecipient Monitoring - 2 C.F.R. § 200.331(d)
Known Questioned Costs: $0

Social Services is still not adhering to its established approach for monitoring subrecipients. The established approach includes having the Division of Community and Volunteer Services (Community and Volunteer Services) exercise agency wide oversight over the subrecipient monitoring process to ensure the various divisions are following the established monitoring plans and produce reports to consolidate the monitoring activity agency wide. During fiscal year 2019, Social Services did not produce quarterly reports to brief Executive Management on subrecipient monitoring activities for each Division within Social Services.

2 C.F.R. § 200.331(d) requires pass through entities to monitor the activities of subrecipients as necessary to ensure that the sub-award is meeting grant requirements. To aid in this process and mitigate risk, Social Services develops annual monitoring plans across divisions which outline the review process and reports the results of the reviews to executive management quarterly.

Without providing reports to executive management, we are not able to determine if Social Services is assessing each of their division’s completed subrecipient reviews and if executive management is acting upon possible deviations from the plan. During fiscal year 2019, Social Services
underwent a reorganization and created a new Compliance Division. The oversight for the agency’s overall subrecipient monitoring transitioned from Community and Volunteer Services to the Compliance Division. The Compliance Division is in the process of hiring a subrecipient monitoring manager and developing a subrecipient monitoring oversight process.

Social Services should ensure that all divisions are adhering to the established approach for monitoring subrecipients. Specifically, Social Services should work to ensure progress reports are provided to executive management for review and monitoring of subrecipients.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-091: Continue to Improve Controls over Subrecipient Monitoring

Applicable to: Department of Social Services

Prior Year Finding Number: 2018-092
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency
CFDA Title and CFDA #: Community Services Block Grant - 93.569; Foster Care Title IV-E - 93.658; Adoption Assistance - 93.659; Social Services Block Grant - 93.667; Medicaid Cluster - 93.775, 93.777, 93.778; TANF Cluster - 93.558
Federal Award Number and Year: Various - 2019
Name of Federal Agency: U.S. Department of Health and Human Services
Known Questioned Costs: $0

Social Services continues to not provide assurance that audits are performed and reviewed for all subrecipients expending $750,000 or more and that management is making timely decisions based on the results of the audit report reviews. Community and Volunteer Services is responsible for reviewing non-profit organization audit reports and the Local Review Team is responsible for reviewing locality audit reports. Our testwork identified the following:

- Five of 17 (29%) non-profit organizations expending more than $750,000 tested had not been reviewed by Community and Volunteer Services, to determine if proper audits were completed, at the time of our audit. Three of the five organizations selected for testwork were not included on the non-profit audit report tracking spreadsheet until it was brought to Community and Volunteer Services’ attention during our audit.
• Reports to senior management and regional directors, detailing the results of the locality and non-profit organization audit report reviews to be used in issuing official management decisions to subrecipients, have not been issued by the Local Review Team or Community and Volunteer Services.

According to 2 C.F.R. § 200.331 (f), pass thru entities are required to verify that every subrecipient is audited as required. 2 C.F.R. § 200.501(a-b) requires all non-Federal entities that expend $750,000 or more during the non-Federal entity’s fiscal year in Federal awards must have a single or program-specific audit conducted for that year. 2 C.F.R. § 200.512 requires audit reports be submitted within the earlier of 30 days after receipt of the auditor’s report or nine months after the end of the audit period. Additionally, 2 C.F.R. § 200.521 requires pass-through entities to issue management decisions within six months of acceptance of the audit report.

Without maintaining a complete listing of all non-profit organizations required to have an audit and reviewing all of those audit reports, Community and Volunteer Services is unable to provide assurance that it is meeting the audit requirements set by the federal regulations. Additionally, without providing senior management and regional directors the results of the audit report reviews timely, management cannot make decisions within the timeframes set by the federal regulations.

Community and Volunteer Services attributed the incomplete tracking spreadsheet for non-profit reviews to competing priorities and difficulty in obtaining all audit reports. Social Services plans to transition the review of non-profit organization audit reports from Community and Volunteer Services to the newly established Compliance Division in fiscal year 2020. Additionally, review results have not been reported to senior management and regional directors because Community and Volunteer Services and the Local Review Team want all non-profit and locality audit reports to be received and all reviews to be completed prior to reporting results.

Social Services should ensure that all subrecipients are monitored in accordance with all federal requirements. Additionally, Social Services should develop a process to ensure that senior management and other responsible parties are notified timely of the results of the audit reviews so that prompt and meaningful management decisions can be issued in accordance with federal requirements.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.
2019-092: Ensure Performance Evaluations are Completed for Professional Service Contracts

Project managers for professional service contracts are not always completing performance evaluations for consultants. Of the 18 professional services contracts we tested, Transportation did not have any evidence that the project manager completed a performance evaluation for 13 (or 72 percent) of the contracts. 2 C.F.R. § 200.317 requires each state to use the same standards for federal procurement that it uses for state procurement. The Virginia Public Procurement Act § 2.2-4300(C) states that public bodies should obtain high quality goods and services. Section 7.2 of Transportation’s Manual for the Procurement and Management of Professional Services established the design of performance evaluation controls and assigns related responsibilities in order to ensure the quality of the services received. The manual requires the project manager to evaluate and document the consultant’s performance, at a minimum, in January and June of each year over the duration of the project and upon expiration of the contract.

During fiscal year 2019, Transportation managed over 160 professional service contracts valued at approximately $990 million. Transportation uses the performance evaluations as a control to measure each consultant’s performance and to determine whether it is appropriate to continue to do business with the consultant in the future. If Transportation does not ensure that performance evaluations are completed as designed, Transportation places the Commonwealth at risk of not being able to hold consultants accountable for nonperformance.

According to certain project managers, they were not completing the performance evaluations because their responsibility for the control activity was not communicated to them and there was a lack of monitoring by management. Transportation should ensure that project managers are aware of the performance evaluation requirements and should dedicate the resources necessary to ensure that project managers are completing performance evaluations as required.
Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-093: Improve Controls for Ensuring Quality Improvement Recommendations are Implemented

Applicable to: Department of Transportation

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency
CFDA Title and CFDA #: Highway Planning and Construction Cluster - 20.205, 20.219, 20.224
Federal Award Number and Year: Various - 2019
Name of Federal Agency: U.S. Department of Transportation
Type of Compliance Requirement - Criteria: Special Tests and Provisions - 23 C.F.R. § 637.205
Known Questioned Costs: $0

Transportation’s Construction Division designed and implemented its Construction Quality Improvement Program (Improvement Program) to meet federal requirements for developing a quality assurance program (23 C.F.R § 637.205). During fiscal year 2019, the Improvement Program reviewed 148 contracts which were valued at approximately $400 million. Most reviews resulted in recommendations for making improvements. To ensure recommendations are implemented, Transportation established the control of requiring an Area Construction Engineer (Engineer) to perform follow-up procedures and document that Transportation implemented the recommendations. The Improvement Program Manager (Manager) is responsible for collecting the documented follow-up procedures from the Engineer to monitor compliance with the policy. Of the fifteen reviews we tested, the Manager could not provide documentation as evidence to whether or not the Engineer performed the follow-up control activities for two of the reviews. Without documentation of the follow-up control activities, Transportation does not have evidence that it is making the necessary improvements.

According to management, the lack of documentation of follow-up was not identified because the current process the Manager uses for tracking follow-up control activities performed by the Engineer is labor intensive and relies on a paper-based work flow to monitor follow-up control activities. The Construction Division is aware of this issue and is in the process of implementing a new automated tracking system. Management should continue with its efforts to redesign its processes or explore other options, as necessary.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.
2019-094: **Improve Controls over the Purchasing Process**

**Applicable to:** Department of Behavioral Health and Developmental Services

**Prior Year Finding Number:** 2018-080  
**Type of Finding:** Internal Control and Compliance  
**Severity of Deficiency:** Significant Deficiency

DBHDS is not ensuring compliance with the prompt pay provisions of the Virginia Public Procurement Act and is not properly processing purchase orders through the Commonwealth’s purchasing system. The identified issues are as follows:

- Two of 16 (12.5%) expenses reviewed at one of the four facilities tested (25%) were not paid within the time requirements set by the prompt payment provisions.

- At one of the four facilities tested (25%), Fiscal did not ensure that the vendor charged the correct rate for services, which resulted in a payment at an incorrect amount.

- The Purchasing Department (Purchasing) did not properly process purchase orders through the Commonwealth’s purchasing system for seven of 26 (26.9%) expenses reviewed at two of the four facilities tested (50%).

The untimely payments were due to a lack of communication between Fiscal and Purchasing. This resulted in one payment being included in the incorrect fiscal year, and overdue invoices ranging from 105 to 302 days. Code of Virginia § 2.2-4347 requires state agencies to pay for delivered goods and services within 30 days after receipt of a proper invoice or 30 days after receipt of the goods or services, whichever is later. By not following prompt pay requirements established by the Commonwealth, individual facilities may harm the Commonwealth’s reputation as a buyer, damage relationships with vendors, and could incur late fees. Furthermore, Section 10.11 of the Agency Procurement and Surplus Property Manual (APSPM) encourages agencies with separate fiscal and purchasing departments to develop a Memorandum of Understanding to effectively resolve discrepancies and ensure timely payment.

Fiscal staff did not perform a proper review of the invoice and purchase order prior to approving the payment to ensure the vendor charged the correct rate, which resulted in a payment at the incorrect amount. CAPP Manual Topic 20315 states that the receiving report and purchase order should be obtained and matched to the corresponding invoice prior to approval and payment processing. Without properly matching the invoice to supporting documentation, the agency risks incorrect payment for goods or services.

Facility purchasing departments did not properly process purchase orders related to food service or pharmaceutical drug expenses. As a result, these payments were not supported by purchase orders from the Commonwealth’s purchasing system. Facility purchasing departments were unaware of the requirement and noted processing pharmaceutical purchases through the Commonwealth’s purchasing system.
system would delay compliance with the vendor’s payment terms. Section 14.9 of the APSPM requires the use of the Commonwealth’s purchasing system for certain purchase transaction types. The APSPM states that the purchase of pharmaceuticals is a transaction type that is exempt from agency and transaction fees imposed by the Commonwealth’s purchasing system; however, use of the system is still mandatory. Without the mandatory use of the Commonwealth’s purchasing system for certain purchases, there is an increased potential for reduced transaction transparency, analysis, and reporting.

DBHDS should ensure compliance with the prompt pay provisions through a clearly established process to resolve discrepancies between the Fiscal and Purchasing Departments timely. Fiscal should be trained to properly review invoices and purchase orders prior to approval and payment processing. Management at the individual facilities should improve purchasing processes and controls to ensure the proper use of the Commonwealth’s purchasing system.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

REVENUE AND ACCOUNTS RECEIVABLE

2019-095: Continue Improving the Overpayment Collection Process

Applicable to: Department of Medical Assistance Services

Prior Year Finding Number: 2018-017; 2017-084; 2016-080
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency
CFDA Title and CFDA #: Medicaid Cluster - 93.775, 93.777, 93.778
Federal Award Number and Year: 1805VA5MAP - 2019
Name of Federal Agency: U.S. Department of Health and Human Services
Type of Compliance Requirement - Criteria: Special Tests and Provisions - 42 C.F.R. § 455.16(c)(3)
Known Questioned Costs: $0

Medical Assistance Services’ Accounts Receivable Unit needs to continue to improve its collection process for overpayments. Although improvements have been made in this area, they need to ensure that policies and procedures for collecting overpayments are followed. For two of nine (22%) overpayments identified by the Provider Review Unit, the Accounts Receivable Unit did not send invoice letters in a timely manner. These invoice letters were sent between two and seven days late based on the internal policy. There was one additional overpayment reviewed where the invoice letter was sent 150 days late, but this overpayment was less than one dollar, which brings into question the cost effectiveness of the collection policy.
Medical Assistance Services, to comply with the Virginia Debt Collection Act, Code of Virginia § 2.2-4800-4809, established procedures to pursue collection of overpayments from recipients and providers. These procedures specify timeframes in which overpayment notice letters and invoicing letters must be sent to recipients and providers. For provider overpayments, the procedures require the Accounts Receivable Unit send an invoice letter to the provider 34 days from the date they receive notification from the Provider Review Unit. By not following established procedures designed to meet Commonwealth requirements, Medical Assistance Services is potentially not collecting money owed from providers or not collecting money owed to them timely.

There has been significant turnover in Accounts Receivable staff including the Accounts Receivable Manager position. This turnover, combined with the high volume of work, has contributed to the majority of the delays identified. The issue related to the immaterial overpayment was due to confusion over whether or not there is an internal policy that establishes a threshold for collection (i.e., the amount has to be over a certain dollar amount to pursue collection efforts).

Management should evaluate resources assigned to these areas to ensure they are adequate to perform the necessary functions in accordance with policies and procedures. In addition, Medical Assistance Services should evaluate its current policies in several areas. The Accounts Receivable Unit should evaluate its internal policy over collections to determine whether it is appropriate to establish a dollar threshold to guide collections efforts. This will help to ensure resources are used in the most effective manner. In addition, the Accounts Receivable Unit may want to clarify its internal policy in terms of business days or calendar days.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-096: Implement Separation of Duties over Accounts Receivable Resulting from Dealership Transactions

Applicable to: Department of Motor Vehicles

Prior Year Finding Number: N/A
Type of Finding: Internal Control
Severity of Deficiency: Significant Deficiency

Motor Vehicles does not have proper separation of duties over accounts receivable resulting from errors in transactions processed by dealerships participating in the agency’s Online Dealer program. Employees in the Dealer Services Work Center (Work Center) review dealership transactions to ensure there are no errors. If a Work Center employee identifies an error during their review of transactions, that same employee is responsible for notifying the dealership of the error and creating a receivable for Motor Vehicles. Should the dealership’s error result in the dealership owing money to Motor Vehicles,
the dealership remits payment directly to the Work Center employee, who then processes it and sends it to the cashier’s office within Fiscal Services for deposit. The same employee that created and recorded the receivable and communicated it to the dealership is responsible for removing the receivable when the funds are received. Allowing the Work Center to identify, create, and collect account receivables poses a separation of duties violation.

Separation of duties must exist for financial transactions as part of any sound system of internal controls. Additionally, internal controls should provide a safeguarding of assets, which includes accounts receivable. CAPP Manual Topic 20905 indicates agency management is responsible for instituting internal control over recording of financial transactions that is designed to provide reasonable assurance regarding the reliability of those records. Not having proper separation of duties increases Motor Vehicles’ risk that fraud or errors will go undetected.

The Work Center does not have formal, written policies and procedures over their process of reviewing dealership transactions. In addition, the Work Center does not typically communicate errors resulting in the creation of an accounts receivable from dealerships to Fiscal Services. Therefore, management overseeing Fiscal Services was not aware that the Work Center was identifying, creating, and collecting accounts receivable.

The Work Center should create formal, written policies and procedures to document their process of reviewing dealership transactions and have management of Fiscal Services evaluate those internal controls for reasonableness to ensure proper separation of duties over accounts receivable owed to Motor Vehicles.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

EXPENSES AND ACCOUNTS PAYABLE

2019-097: Improve Process for Payment of Risk Management Invoices

Applicable to: Department of the Treasury

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

Treasury’s Risk Management Division (Risk Management) is not adequately monitoring or ensuring compliance with the prompt payment provisions in the Code of Virginia. We also noted this issue in our fiscal year 2017 report, but not in our fiscal year 2018 report as Treasury indicated it had been resolved. Risk Management does not have sufficient oversight in place to ensure all invoices
received are being processed and paid according to the prompt payment provisions regardless of whether the invoice is received by Risk Management directly or if the invoice is received via the Office of the Attorney General. For the invoices we reviewed, we found ten out of 70 (14 percent) were paid between one and 12 days after the 30-day prompt pay limitation. The invoices were paid an average of nine days after the 30-day limit. In addition, one invoice was lacking time and date documentation to indicate when the invoice was received, making it impossible to determine whether the payment was made on time. Also, Risk Management was unable to produce documentation to adequately support one out of 14 (7%) payments reviewed.

The Code of Virginia § 2.2-4347 states that agencies are required to pay invoices no later than 30 days after the receipt of the goods, services, or invoice, whichever is later, or the due date specified in the vendor’s contract. Not following prompt pay requirements established by the Commonwealth may harm the Commonwealth’s reputation as a buyer, damage relationships with vendors, and result in late fees. CAPP Manual Topic 21005, Records and Retention, outlines the minimum record retention periods for audit support, including all records relating to expenses. The Department of Accounts and the Library of Virginia established the minimum retention period for expenses at five years past the end of the fiscal year in which it occurred.

Risk Management indicated that the untimely payments are a result of several factors, including staff vacancies, new personnel training, and an uneven distribution of work for personnel. Additionally, the Division receives an influx of invoices towards the end of the calendar year, leading to an increased workload.

Risk Management should strengthen its internal controls and policies and procedures to ensure compliance with prompt payment provisions, including further developing and improving operational procedures, adequately training staff, and maintaining sufficient management oversight of the payment process. Further, management should ensure that adequate staffing is available, and that operations are adjusted accordingly for the high-volume periods anticipated during the year. In addition, Risk Management should communicate the importance of document retention to staff and ensure that staff maintain and retain all documents supporting payments in accordance with the CAPP Manual and Commonwealth retention policies.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at [www.apa.virginia.gov](http://www.apa.virginia.gov). In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

Applicable to: Department of the Treasury

Prior Year Finding Number: N/A
Type of Finding: Internal Control
Severity of Deficiency: Significant Deficiency

Treasury does not have updated and comprehensive policies and procedures over the review of third-party service providers’ Service Organization Control (SOC) reports. SOC report reviews are a key internal control as Treasury contracts with several service organizations and these organizations’ transactions and internal control environments have a direct impact on Treasury’s financial operations through the financial transactions they process using the subservice organizations. The policy in place during fiscal year 2019 was drafted in 2008, and contains several inaccuracies in regards to Treasury’s operations. The policy and procedure does not adequately address:

- Documentation of complementary user entity controls (CUECs) and the related controls in place;
- The steps needed to address internal control deficiencies and/or exceptions noted in reviews; and
- Current standards and Treasury organization.

The CAPP Manual Topic 10305 requires agencies to have adequate interaction with service providers to appropriately understand the provider’s internal control environment. Agencies must also maintain oversight over the provider to gain assurance over outsourced operations. SOC reports are a key tool in gaining an understanding of the provider’s internal control environment and maintaining oversight over outsourced operations.

Without updated and comprehensive policies and procedures over SOC report reviews, Treasury may be unable to ensure that their CUECs are sufficient to support their reliance on service providers’ controls design, implementation, and operating effectiveness and address any internal control deficiencies and/or exceptions noted in the report.

Treasury has some documentation of internal controls through its Agency Risk Management and Internal Control Standards (ARMICS) process that correlate to some of the CUECs identified in SOC reports; however, this documentation is independent of the SOC review process performed by staff. In addition, staff responsible for reviewing the SOC reports did not document or understand the CUECs, and maintained that they did not have policies and procedures concerning their reviews, which reduces the operational effectiveness of the reviews. Treasury has developed a checklist in response to the
previous audit, which documents the elements in the SOC reports reviewed, but the checklist does not require consideration of whether CUECs have been implemented or the evaluation of exceptions noted within the report. In addition, Treasury has been taking steps to improve overall policies and procedures in the current fiscal year through their Internal Review department’s activities.

Treasury should update and improve policies and procedures already in place to ensure an integrated process wherein staff responsible for SOC report reviews and ARMICS processes are accurately and effectively identifying, incorporating, and documenting compensating internal controls to ensure the financial information received from service organizations is suitably assured through the coordinated efforts of Treasury staff. In addition, Treasury should use SOC reports as a component of its oversight activities over its providers to confirm they comply with the requirements outlined in the CAPP Manual and industry best practices. Finally, if Treasury identifies exceptions in the SOC reports, management should document their evaluation of the exception, including whether additional complementary controls are necessary to mitigate the risk to the Commonwealth.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

STUDENT FINANCIAL ASSISTANCE

2019-099: Improve Reporting to National Student Loan Data System

Applicable to: Virginia Commonwealth University

Prior Year Finding Number: 2018-101
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency

In our last audit, we recommended Virginia Commonwealth University (University) improve controls to ensure reporting of enrollment data to the National Student Loan Data System (NSLDS) is accurate and timely. In accordance with Code of Federal Regulations 34 C.F.R. 685.309 and further outlined in the Enrollment Guide, enrollment changes must be reported to NSLDS within 30 days when attendance changes, unless a roster file will be submitted within 60 days. The accuracy of Title IV enrollment data depends heavily on information reported by institutions. By not submitting timely and accurate data to NSLDS, the University can affect the reliance placed by the U.S. Department of Education on the data for monitoring purposes and other higher education institutions when making aid decisions.

The University’s Office of Financial Aid has developed a corrective action plan, which included the implementation of new procedures in the Spring of 2019 to identify and correct errors in the
reporting to the NSLDS. The corrective action plan remains ongoing as of June 30, 2019. We will review the implementation of the University’s corrective action during our next audit.

**Views of Responsible Officials:**

Views of responsible officials are in the report related to their agency, which can be found at [www.apa.virginia.gov](http://www.apa.virginia.gov). In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

**SCHEDULE OF FINDINGS AND QUESTIONED COSTS**

**SECTION 3: FEDERAL AWARD FINDINGS AND QUESTIONED COSTS**

**FEDERAL AWARD FINDINGS AND QUESTIONED COSTS**

**U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES**

- 2019-024: Remove Separated Employee Access in a Timely Manner
- 2019-037: Improve Web Application Security
- 2019-039: Improve Web Application Security
- 2019-049: Develop Records Retention Requirements and Processes for Case Management System
- 2019-051: Complete and Approve the System Security Plan
- 2019-052: Develop a Process to Maintain Oversight for Third-Party Providers
- 2019-059: Continue Improving Database Security
- 2019-063: Continue Improving IT Risk Management Program
- 2019-083: Ensure Employees Complete Required Conflict of Interest Training
- 2019-088: Improve Controls over the Income Verification for the TANF Program
- 2019-090: Ensure Subrecipient Reviews Adhere to Monitoring Plan
- 2019-091: Continue to Improve Controls over Subrecipient Monitoring
- 2019-095: Continue Improving the Overpayment Collection Process

Each of the findings referenced above represents a compliance finding that could be material to the basic financial statements and are required to be reported under Government Auditing Standards. These findings relate to both the financial statements and federal awards. The details of these findings are reported within “Section 2: Financial Statement Findings” of the Schedule of Findings and Questioned Costs.
2019-100: Improve Controls over TANF Federal Performance Reporting

Applicable to: Department of Social Services

Prior Year Finding Number: 2018-089
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency
CFDA Title and CFDA #: TANF Cluster - 93.558
Federal Award Number and Year: 1901VATANF - 2019
Name of Federal Agency: U.S. Department of Health and Human Services
Type of Compliance Requirement - Criteria: Reporting - 45 C.F.R. § 265.7(b)
Known Questioned Costs: $0

Social Services does not have adequate controls in place to ensure accurate federal reporting for two TANF performance reports, the ACF-199 “TANF Data Report” and ACF-209 “SSP-MOE Data Report.” These reports are submitted quarterly and utilize a case management system to create the reports. During our review, we identified the following discrepancies in four key line items, where key line items did not agree to information maintained in the case management system:

- Nine out of 50 (18%) cases did not properly report the Receives Subsidized Child Care key line item;
- One out of 25 (4%) cases did not properly report the Toward Federal Time-Limit key line item; and
- Six out of 50 (12%) cases did not properly report the Work Participation Status and Unsubsidized Employment key line items. One of the cases was the result of the key line items not agreeing to information maintained in the case management system. The five remaining cases did agree to the information in the case management system; however, the information in the system was entered incorrectly by the local Department of Social Services.

45 C.F.R. § 265.7(b) requires states to have complete and accurate reports which means that the reported data accurately reflects information available in case records, data is free of computational errors, and is internally consistent. Reporting potentially inaccurate or incomplete information prevents the Administration for Child and Families from adequately monitoring Social Services’ work participation rates and overall performance for the TANF program. In addition, if Social Services is found to not be meeting minimum work participation rates, a penalty can be imposed on the awarded grant. These reporting errors can be attributed to the implementation of the case management system. Social Services should continue working with Enterprise Systems to correct system deficiencies to ensure all information submitted in federal reports is accurate.
Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-101: Ensure Family Services Subrecipient Reviews Adhere to Monitoring Plan

Applicable to: Department of Social Services

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency
CFDA Title and CFDA #: Foster Care Title IV-E - 93.658; Adoption Assistance - 93.659
Federal Award Number and Year: 1901VAADPT - 2019
Name of Federal Agency: U.S. Department of Health and Human Services
Type of Compliance Requirement - Criteria: Subrecipient Monitoring - 2 C.F.R. § 200.331(d)
Known Questioned Costs: $0

Social Services’ Division of Family Services (Family Services) cannot provide assurance that Adoption Assistance and Title IV-E Foster Care subrecipient monitoring reviews are completed timely and in accordance with Family Services’ subrecipient monitoring plan and related processes. Our testwork over 25 Adoption Assistance and IV-E Foster Care monitoring reviews identified the following:

- For four Adoption Assistance reconciliation reviews tested, there was no communication notifying the local agency the review was complete and if variances were identified in accordance with Family Services’ established monitoring process.

- For one Adoption Assistance reconciliation review tested, variances were identified by the assigned Quality Assurance and Accountability (QAA) consultant in October 2018, and the variances have not been resolved, over one year later.

- For one IV-E Foster Care Training monitoring review tested, all documentation supporting the QAA consultant’s assessment and conclusions was not provided.

2 C.F.R. § 200.331(d) requires pass through entities to monitor the activities of subrecipients as necessary to ensure that the sub-award is meeting grant requirements. To aid in this process and mitigate risk, Family Services develops an annual monitoring plan, which outlines the review process. Without maintaining adequate support and resolving identified issues timely, Family Services cannot provide assurance that it is completing subrecipient monitoring reviews in accordance with its monitoring plan and federal guidelines.

Family Services implemented the process of communicating the results of its Adoption Assistance reconciliation reviews in February 2018; however, Family Services stated that during fiscal year 2020
they were able to streamline and improve the process. Additionally, the consultant that completed the IV-E Foster Care Training monitoring review separated from Social Services and the evidence supporting the consultant’s assessments was not retained and/or accessible by Family Services.

Family Services should ensure that all consultants are performing reviews as outlined by the monitoring plan and internal processes. Additionally, Family Services should ensure that reviews are being completed timely and adequate documentation is maintained supporting the reviews.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at [www.apa.virginia.gov](http://www.apa.virginia.gov). In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-102: Implement Opioid Grant Sub-Recipient Monitoring

Applicable to: Department of Behavioral Health and Developmental Services

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency
CFDA Title and CFDA #: Opioid STR - 93.788
Federal Award Number and Year: H79TI081682 - 2018
Name of Federal Agency: U.S. Department of Health and Human Services
Type of Compliance Requirement - Criteria: Subrecipient Monitoring - 45 C.F.R. § 75.352(6)(b)(d)(e)
Known Questioned Costs: $0

DBHDS is not properly monitoring the awards provided to Community Service Boards (CSBs) for the opioid grants as determined by DBHDS’s Office of Budget and Financial Reporting’s CSB Risk Assessment. DBHDS management responsible for the opioid grants did not have sufficient documentation of onsite visits with the CSBs to monitor programmatic progress for both the STR Grant and the SOR Grant that encompass the Catalogue of Federal Domestic Assistance (CFDA) 93.788.

The Code of Federal Regulations (C.F.R.) 45 C.F.R. § 75.352(6)(b) requires an evaluation of each subrecipient’s risk of noncompliance with Federal statutes, regulations, and the terms and conditions of the subaward for purposes of determining the appropriate subrecipient monitoring described in paragraphs (d) and (e) of this section.

45 C.F.R. § 75.352(6)(d) requires monitoring the activities of the subrecipient as necessary to ensure that the subaward is used for authorized purposes, in compliance with Federal statutes, regulations, and the terms and conditions of the subaward; and that subaward performance goals are achieved.
45 C.F.R. § 75.352(6)(e)(2) states that depending upon the pass-through entity's assessment of risk posed by the subrecipient, the following monitoring tools may be useful for the pass-through entity to ensure proper accountability and compliance with program requirements and achievement of performance goals: performing on-site reviews of the subrecipient's program operations.

The SOR grant was new for the fiscal year, and DBHDS did not have a structured and coordinated internal process for the monitoring of the SOR Grant. Insufficient and unreasonable evidence of subrecipient monitoring activities could result in unallowable expenses and jeopardizes current and future funding. Current monitoring activities provide no authoritative proof that the CSBs are providing the services as outlined in the performance contract between DBHDS and the CSBs. The state, through DBHDS, is liable to the federal government for any funds that CSBs do not spend correctly.

DBHDS should properly document subrecipient monitoring over the opioid grants to ensure that CSBs are properly following federal requirements. Further, DBHDS management should improve communication effectiveness between DBHDS’s subrecipient monitoring departments for compliance with the Code of Federal Regulations.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-103: Provide Federal Award Requirements to Subrecipients

Applicable to: Department of Behavioral Health and Developmental Services

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency
CFDA Title and CFDA #: Opioid STR - 93.788
Federal Award Number and Year: H79TI081682 - 2018
Name of Federal Agency: U.S. Department of Health and Human Services
Type of Compliance Requirement - Criteria: Subrecipient Monitoring - 45 C.F.R. § 75.352(a)
Known Questioned Costs: $0

DBHDS is not providing federal award requirements to the CSBs for the opioid grants. DBHDS did not have a performance contract in place with the CSBs for the funding of the SOR Grant. A review of the CSB’s performance contracts determined that the SOR Grant funding awarded to the CSBs from DBHDS did not exist. The SOR Grant accounts for $12,476,526 of $19,862,333 (62.81%) of total federal awards passed-through to the CSBs for opioid related services.

45 C.F.R. § 75.352(a) requires every subaward be clearly identified to the subrecipient as a subaward and include certain information at the time of the subaward and if any of these data elements
change, include the changes in subsequent subaward modification. When this information is not available, the pass-through entity must provide the best information available to describe the federal award and subaward.

The lack of a performance contract or memorandum of understanding outlining the requirements of the SOR Grant increases the risk of the CSBs using the awards for activities not related to the opioid grant or for unallowable costs associated with the opioid grant. This creates a potential financial liability for DBHDS, and they have limited recourse with the CSBs due to the lack of a legally binding document.

The SOR Grant is a new grant, and DBHDS management assumed that the SOR Grant was covered in the existing performance contracts with the CSBs for fiscal year 2019. Therefore, DBHDS management did not have an addendum with the CSBs to cover the SOR Grant funding.

DBHDS should provide CSBs with the federal requirements attached to their federal awards. CSBs will be aware of the requirements of the federal awards, and DBHDS will be able to properly monitor whether the CSB complies federal regulations set forth in the contract.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

U.S. DEPARTMENT OF EDUCATION

2019-104: Improve the Case Management System Access Review Process

Applicable to: Department for Aging and Rehabilitative Services

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency
CFDA Title and CFDA #: Rehabilitation Services Vocational Rehabilitation Grants to States - 84.126
Federal Award Number and Year: H126A180069 - 2018
Name of Federal Agency: U.S. Department of Education
Type of Compliance Requirement - Criteria: Eligibility - 2 C.F.R. § 200.303(e)
Known Questioned Costs: $0

Aging and Rehabilitative Services did not perform a comprehensive system access review of the case management system. Aging and Rehabilitative Services, the Wilson Workforce and Rehabilitation Center, and Blind and Vision Impaired use this mission-critical system to process eligibility determinations, set up services planned for clients, and authorize payments. Aging and Rehabilitative Services is responsible for ensuring access is appropriate.
The Commonwealth’s Information Security Standard, SEC 501 (Security Standard), Section AC-2j, requires agencies to “review accounts for compliance with account management requirements on an annual basis or more frequently…” The absence of a comprehensive access review increases the risk of unauthorized individuals inappropriately altering or viewing sensitive information or authorizing eligibility determinations. There is not a backup person to perform this review if the case management system manager is unable to complete it. This prevented completion of the annual access review.

Aging and Rehabilitative Services should perform an annual review of access to the case management system. In addition, Aging and Rehabilitative Services should ensure there are backups for mission-critical duties such as access reviews. This will reduce the risk of unauthorized transactions and ensure compliance with the Security Standard.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-105: Improve the Eligibility Determination Process for Vocational Rehabilitation

Applicable to: Department for Aging and Rehabilitative Services

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency
CFDA Title and CFDA #: Rehabilitation Services Vocational Rehabilitation Grants to States - 84.126
Federal Award Number and Year: H126A180069 - 2018
Name of Federal Agency: U.S. Department of Education
Type of Compliance Requirement - Criteria: Eligibility - 29 U.S.C. § 722
Known Questioned Costs: $0

Aging and Rehabilitative Services’ Vocational Rehabilitation (VR) counselors did not determine individuals’ eligibility or process extensions within 60 days for 17% of individuals sampled. United States Code (29 U.S.C. § 722), Eligibility and Individualized Plan for Employment, requires states to determine whether an individual is eligible for VR services within a reasonable period of time, not to exceed 60 days, after the individual has submitted an application for the services.

Not determining eligibility or processing extensions in a timely manner makes Aging and Rehabilitative Services out of compliance with this federal requirement. Additionally, if an individual’s circumstances change, making them ineligible between the time the individual submits the application and the VR counselor makes the eligibility determination, this risks providing benefits to an ineligible recipient. Untimely eligibility determinations could also cause the individuals to miss certain job opportunities as they await assistance.
Significant turnover in VR counselors caused the untimely determinations of eligibility. This turnover and a prioritization of other tasks caused the counselors to be unresponsive to system notifications of eligibility due dates.

Aging and Rehabilitative Services should enhance the process by which it responds to the notifications and ensure counselors are available to determine eligibility or request extensions within 60 days as required by the VR grant. This will reduce the risk of providing benefits to ineligible recipients, ensure accurate and up-to-date records of clients’ needs are maintained, and reduce noncompliance with this federal requirement.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-106: Improve Processes to Comply with the Conflicts of Interest Act

Applicable to: Department for Aging and Rehabilitative Services; Department for the Blind and Vision Impaired

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency
CFDA Title and CFDA #: Rehabilitation Services Vocational Rehabilitation Grants to States - 84.126
Federal Award Number and Year: H126A180069 - 2018
Name of Federal Agency: U.S. Department of Education
Type of Compliance Requirement - Criteria: Other - 2 C.F.R. § 200.303
Known Questioned Costs: $0

Aging and Rehabilitative Services did not identify 196 VR counselors and staff who determine eligibility and one grants manager as being in positions of trust to ensure all such individuals comply with Statement of Economic Interest (SOEI) requirements. Blind and Vision Impaired did not identify one VR counselor who transferred from Aging and Rehabilitative Services as occupying a position of trust. As a result, these individuals did not complete the required training and did not file SOEI disclosure forms.

Executive Order Number Eight (Executive Order) from the Office of the Governor requires agencies to submit a report to the Office of the Secretary of the Commonwealth identifying, by name and job title, the positions that must file SOEI forms. Blind and Vision Impaired did not identify one VR counselor who transferred from Aging and Rehabilitative Services as occupying a position of trust. As a result, these individuals did not complete the required training and did not file SOEI disclosure forms.
Without identifying and tracking all individuals in positions of trust, Aging and Rehabilitative Services and Blind and Vision Impaired cannot ensure these individuals file SOEI forms and complete the training as required. Individuals who do not complete the training may be unable to recognize or resolve conflicts of interest. This increases the risk of fraud and possible lawsuits involving these employees as those who do not complete the required SOEI form may, as stated by the Code of Virginia § 2.2-3124, be subject to a $250 civil penalty.

Aging and Rehabilitative Services’ existing process does not properly identify all job positions that it should consider to be positions of trust. This caused Aging and Rehabilitative Services’ failure to obtain SOEI forms and provide training to these individuals.

Aging and Rehabilitative Services should enhance existing procedures and provide guidance to ensure that the SOEI program coordinators identify employees in positions of trust upon hire, transfer, or changes in job responsibilities. This will reduce the risk of noncompliance with the Conflicts of Interest Act and reduce the risk of conflicts associated with transactions processed by these employees.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

U.S. DEPARTMENT OF EDUCATION AND SOCIAL SECURITY ADMINISTRATION

2019-107: Improve Documentation to Show Compliance

Applicable to: Department for Aging and Rehabilitative Services; Department for the Blind and Vision Impaired

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency
CFDA Title and CFDA #: Rehabilitation Services Vocational Rehabilitation Grants to States - 84.126; Disability Insurance/SSI Cluster - 96.001
Federal Award Number and Year: H126A180069; 1804VADI00 - 2018
Name of Federal Agency: U.S. Department of Education; Social Security Administration
Type of Compliance Requirement - Criteria: Activities Allowed or Unallowed - 29 U.S.C. § 722 (b) and POMS DI 39545.000 and 39569.000
Known Questioned Costs: $0

Aging and Rehabilitative Services and Blind and Vision Impaired do not maintain adequate documentation to demonstrate compliance with their federal grant agreements and Commonwealth policies. During our review, we found the following deficiencies in the documentation that Aging and Rehabilitative Services and Blind and Vision Impaired provided:
• the Commonwealth’s physician fee schedule for payments to consultative examination (CE) providers for the Social Security Disability Insurance and Supplemental Security Income programs showed no evidence of review or approval;

• there was no evidence of a comprehensive oversight management review of the CE providers for suspension and debarment for the Social Security Disability Insurance and Supplemental Security Income programs;

• twelve percent of benefit expenses sampled showed no evidence of counselor approval for the VR program;

• the IT department’s business impact analysis showed no evidence of review; and

• the Aging and Rehabilitative Services Annual VR Program/Cost Report (RSA-2) showed no evidence of review or approval.

Section DI (Disability Insurance) 39545.600: Fee Schedules, of the Social Security Administration’s Program Operations Manual System (POMS) requires retention of documentation to support payment rates and regional office approval of rate increases. Section DI 39569.300: Disability Determination Services Requirements, of POMS prohibits Aging and Rehabilitative Services from using CE providers who are currently excluded, suspended, or barred from participating in federal programs. The United States Code (29 U.S.C. § 722 (b)) and Aging and Rehabilitative Services’ internal policy requires VR counselors to review and approve expenses for individuals’ plans for employment to ensure the expense is allowable and reasonable. The Security Standard, Section 3.2.7 requires agencies to perform an annual review of its business impact analysis. Aging and Rehabilitative Services’ VR Reporting policy requires review of each federal report prior to submission.

The lack of documentation of reviews and approvals is out of compliance with federal and Commonwealth guidelines. Although Aging and Rehabilitative Services and Blind and Vision Impaired have indicated they perform the necessary reviews, the absence of documentation increases the risk that these reviews and approvals may not occur. A lack of review increases the risk of inaccurate reporting, incorrect payment rates, improper payments and further instances of noncompliance.

Aging and Rehabilitative Services’ and Blind and Vision Impaired’s inadequate level of documentation was due to management and staff oversight. Aging and Rehabilitative Services and Blind and Vision Impaired should retain documentation over reviews and approvals. Additionally, Aging and Rehabilitative Services and Blind and Vision Impaired should provide training to all personnel regarding the need to retain documentation used to support compliance with federal and Commonwealth requirements. This will reduce instances of noncompliance with these requirements and reduce the risk of improper transactions and reporting.
Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

2019-108: Improve Oversight of Third-Party Service Providers

Applicable to: Department for Aging and Rehabilitative Services

Prior Year Finding Number: N/A
Type of Finding: Internal Control and Compliance
Severity of Deficiency: Significant Deficiency
CFDA Title and CFDA #: Rehabilitation Services Vocational Rehabilitation Grants to States - 84.126; Disability Insurance/SSI Cluster - 96.001
Federal Award Number and Year: H126A180069; 1804VADIO00 - 2018
Name of Federal Agency: U.S. Department of Education; Social Security Administration
Type of Compliance Requirement - Criteria: Other - 2 C.F.R. § 200.303
Known Questioned Costs: $0

Aging and Rehabilitative Services does not gain assurance that a third-party service provider who manages and maintains an outsourced information technology (IT) system has a secure environment to protect its sensitive and mission-critical data. For external IT systems, the Commonwealth’s Hosted Environment Information Security Standard, SEC 525 (Hosted Environment Security Standard), Section SA-9-COV 3.1, requires agencies to “perform an annual security audit of the environment or review the annual audit report of the environment conducted by an independent, third-party audit firm on an annual basis.”

Without gaining assurance over third-party service providers’ IT environments, Aging and Rehabilitative Services cannot validate the effectiveness of the third-party’s IT controls. This risks allowing the service provider to operate outside the Security Standard and the potential compromise of sensitive data.

Aging and Rehabilitative Services does not have a policy or formal process in place to identify third-party service providers or to review those service providers’ audit reports. Additionally, Aging and Rehabilitative Services’ contract with the third-party service provider does not require annual System and Organizational Controls (SOC) reports from the provider.

Aging and Rehabilitative Services should develop a formal process to identify all third-party service providers and obtain assurance that these providers have secure IT environments. Aging and Rehabilitative Services should also ensure contractual requirements exist for third-party service providers to provide annual SOC reports to satisfy the Hosted Environment Security Standard. Aging and Rehabilitative Services’ process should include a review of the third-party providers’ SOC report on an annual basis. Implementation of these practices into the information security program will help to
ensure third-party providers’ IT controls protect the confidentiality, integrity, and availability of sensitive and mission-critical sensitive data.

Views of Responsible Officials:

Views of responsible officials are in the report related to their agency, which can be found at www.apa.virginia.gov. In summary, the views of responsible officials in the agency report do not express a disagreement with the finding.

U.S. DEPARTMENT OF TRANSPORTATION

2019-092: Ensure Performance Evaluations are Completed for Professional Service Contracts
2019-093: Improve Controls for Ensuring Quality Improvement Recommendations are Implemented

Each of the findings referenced above represents a compliance finding that could be material to the basic financial statements and are required to be reported under Government Auditing Standards. These findings relate to both the financial statements and federal awards. The details of these findings are reported within “Section 2: Financial Statement Findings” of the Schedule of Findings and Questioned Costs.

U.S. DEPARTMENT OF AGRICULTURE

2019-032: Implement Process for Ongoing Monitoring of System Access

The finding referenced above represents a compliance finding that could be material to the basic financial statements and is required to be reported under Government Auditing Standards. This finding relates to both the financial statements and federal awards. The details of this finding are reported within “Section 2: Financial Statement Findings” of the Schedule of Findings and Questioned Costs.

U.S. DEPARTMENT OF LABOR

2019-044: Improve Database Security

The finding referenced above represents a compliance finding that could be material to the basic financial statements and is required to be reported under Government Auditing Standards. This finding relates to both the financial statements and federal awards. The details of this finding are reported within “Section 2: Financial Statement Findings” of the Schedule of Findings and Questioned Costs.
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<th>Corrective Action and Applicable Deliverables</th>
<th>Current Status</th>
<th>Significant Differences Between Previously Reported Corrective Action</th>
<th>Reason for Recurrence</th>
<th>Corrective Action Taken to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>40</td>
<td>2018-021</td>
<td>Properly Classify Lease Renewals and Establish Policies for Renovations</td>
<td>N/A</td>
<td>-</td>
<td>DGS</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>41</td>
<td>2018-022</td>
<td>Improve Preparation Procedures for Attachment 11</td>
<td>N/A</td>
<td>-</td>
<td>DGS</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Department of Human Resource Management**

2018 23 2018-007 Improve Controls Over Financial Reporting

N/A  -  DHRM  Corrective action is ongoing

DHIRM is in the process of modifying the existing contract with the actuary to specific to the requirements and deadlines for the annual GASB Statement No. 75 reporting. OCF and OHB staff are working together to establish a formal review process. Internal deadlines are to be established to allow adequate review time. GASB Statement No. 75 training is under research to offer to financial reporting staff in order to properly consider, research and apply the reporting requirements.

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<th>Reason for Recurrence</th>
<th>Corrective Action Taken to Date</th>
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</thead>
<tbody>
<tr>
<td>2018</td>
<td>25</td>
<td>2018-008</td>
<td>Reconcile Billing Records for the Line of Duty Act Program</td>
<td>N/A</td>
<td>-</td>
<td>DHRM</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>42</td>
<td>2018-023</td>
<td>Improve IT Risk Management and Disaster Recovery Planning</td>
<td>N/A</td>
<td>-</td>
<td>DHRM</td>
<td>Corrective action is ongoing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DHIRM IT Security staff to work with systems and applications owners to develop baseline configurations for systems and applications designated as sensitive. Develop an automated process to document the baseline configurations to notify system owners when changes happen. Commonwealth Security staff assigned to DHIRM is responsible to reform the DHIRM self-assessments. It is included in the IT Security MOU between Commonwealth Security and DHIRM. DHIRM IT Security staff to perform review of findings from self-assessment.

Existing operational mandates (e.g., 2019 Open Enrollment and Statewide salary increase) consumed the time of needed resources and necessitated the date to be pushed out to July 31, 2019.

Staff has bandwidth now to work on completing this corrective action.

Baseline configurations have been developed for sensitive systems. Changes to baseline configurations are detected when they occur. Risk Assessments have been performed and reviewed.

**COMMONWEALTH OF VIRGINIA**

Summary Schedule of Prior Audit Findings

For the Year Ended June 30, 2019

FINANCIAL STATEMENT FINDINGS

**Department of General Services**

2018 40 2018-021 Properly Classify Lease Renewals and Establish Policies for Renovations

N/A  -  DGS  Resolved - Corrective action is completed

2018 41 2018-022 Improve Preparation Procedures for Attachment 11

N/A  -  DGS  Resolved - Corrective action is completed

**Department of Human Resource Management**

2018 23 2018-007 Improve Controls Over Financial Reporting

N/A  -  DHRM  Corrective action is ongoing

DHIRM is in the process of modifying the existing contract with the actuary to specific to the requirements and deadlines for the annual GASB Statement No. 75 reporting. OCF and OHB staff are working together to establish a formal review process. Internal deadlines are to be established to allow adequate review time. GASB Statement No. 75 training is under research to offer to financial reporting staff in order to properly consider, research and apply the reporting requirements.

**Reason for Recurrence**

Meeting with the actuary to establish FY2020 timeline is scheduled January 7, 2019 (telephone conference).

**Corrective Action Taken to Date**

No significance differences.

**Significant Differences Between Previously Reported Corrective Action**

No significance differences.
<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>54</td>
<td>2017-034</td>
<td>Improve IT Risk Management and Disaster Recovery Planning</td>
<td>N/A</td>
<td>-</td>
<td>DHRM</td>
<td>See Finding Number 2018-023</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>74</td>
<td>2016-054</td>
<td>Improve IT Risk Management and Disaster Recovery Planning</td>
<td>N/A</td>
<td>-</td>
<td>DHRM</td>
<td>See Finding Number 2017-034</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>45</td>
<td>2015-041</td>
<td>Improve IT Risk Management and Disaster Recovery Planning</td>
<td>N/A</td>
<td>-</td>
<td>DHRM</td>
<td>See Finding Number 2016-054</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>85</td>
<td>2018-069</td>
<td>Improve Web Application Security Controls</td>
<td>N/A</td>
<td>-</td>
<td>DHRM</td>
<td>Corrective action is ongoing</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DHRM IT Security staff is working with DHRM Systems Operations to review related web pages and assure the correct encryption and controls are implemented. DHRM IT Security staff is working with VITA/SAIC to review related web server headers and assure the sanitization is done and implemented by VITA/SAIC.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>There are impacts from making changes that are more far-reaching than anticipated and require additional research and planning to avoid introducing negative operational impacts.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DHRM has taken steps to make the necessary changes but these efforts have uncovered additional issues that now require further investigation and testing. Solution has been developed and is in need to be tested before implementation. VITA/UNISYS has been requested to provide test environment. Testing will start once environment is setup.</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>53</td>
<td>2017-033</td>
<td>Improve Web Application Security Controls</td>
<td>N/A</td>
<td>-</td>
<td>DHRM</td>
<td>See Finding Number 2018-069</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>30</td>
<td>2016-015</td>
<td>Improve System Security for the Time, Attendance, and Leave System</td>
<td>N/A</td>
<td>-</td>
<td>DHRM</td>
<td>See Finding Number 2017-033</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>18</td>
<td>2015-010</td>
<td>Improve System Security for the Time, Attendance, and Leave System</td>
<td>N/A</td>
<td>-</td>
<td>DHRM</td>
<td>See Finding Number 2016-015</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>87</td>
<td>2018-071</td>
<td>Improve IT Security Governance</td>
<td>N/A</td>
<td>-</td>
<td>DHRM</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>103</td>
<td>2018-086</td>
<td>Review and Document Service Organization Control Reports of Third-Party Service Providers</td>
<td>N/A</td>
<td>-</td>
<td>DHRM</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>55</td>
<td>2017-035</td>
<td>Improve Database and Application Security</td>
<td>N/A</td>
<td>-</td>
<td>DHRM</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>76</td>
<td>2017-056</td>
<td>Improve Vulnerability Identification and Mitigation Process</td>
<td>N/A</td>
<td>-</td>
<td>DHRM</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
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<tr>
<td>2017</td>
<td>87</td>
<td>2017-066</td>
<td>Improve Security Awareness and Training</td>
<td>N/A</td>
<td>-</td>
<td>DHRM</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>83</td>
<td>2016-062</td>
<td>Improve Security Awareness and Training</td>
<td>N/A</td>
<td>-</td>
<td>DHRM</td>
<td>See Finding Number 2017-066</td>
<td></td>
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<tr>
<td>2015</td>
<td>55</td>
<td>2015-050</td>
<td>Improve Security Awareness and Training</td>
<td>N/A</td>
<td>-</td>
<td>DHRM</td>
<td>See Finding Number 2016-062</td>
<td></td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Virginia Employment Commission</td>
<td></td>
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<tr>
<td>2018</td>
<td>48</td>
<td>2018-028</td>
<td>Improve Firewall Management</td>
<td>N/A</td>
<td>-</td>
<td>VEC</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>65</td>
<td>2018-047</td>
<td>Continue to Improve Oversight over Third Party Service Providers</td>
<td>N/A</td>
<td>-</td>
<td>VEC</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
</tr>
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</table>
### Fiscal Year 2017

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<tr>
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<tbody>
<tr>
<td>2017</td>
<td>69</td>
<td>2017-049</td>
<td>Continue to Improve Oversight over Third-Party Service Providers</td>
<td>N/A</td>
<td>-</td>
<td>VEC</td>
<td>Corrective Action is ongoing</td>
<td>See Finding Number 2018-047</td>
<td>VEC is in the process of migrating one of our database environments from Virtual to Physical servers. When this is complete, the version of the database will be upgraded and database logging will be enabled.</td>
</tr>
</tbody>
</table>

### Fiscal Year 2016

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</thead>
<tbody>
<tr>
<td>2016</td>
<td>60</td>
<td>2016-042</td>
<td>Continue Improving Oversight over Third-Party Service Providers</td>
<td>17.225</td>
<td>-</td>
<td>VEC</td>
<td>Corrective Action is ongoing</td>
<td>See Finding Number 2017-049</td>
<td>VEC has been having database administration staffing issues which have prevented us from making substantial progress. VEC has established a recruitment for a full-time classified database administrator. Two offers were made and declined. The second round of recruitment has started. We separated our contracted database administrator on December 18, 2018. We will not be able to fully address this issue until our staffing issues are resolved. Revised estimated completion date is September 30, 2019.</td>
</tr>
</tbody>
</table>

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</thead>
<tbody>
<tr>
<td>2015</td>
<td>65</td>
<td>2015-060</td>
<td>Maintain Oversight over Third-Party Service Providers</td>
<td>17.225</td>
<td>-</td>
<td>VEC</td>
<td>Corrective Action is ongoing</td>
<td>See Finding Number 2016-042</td>
<td>No significant difference.</td>
</tr>
</tbody>
</table>

### Fiscal Year 2014

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</thead>
<tbody>
<tr>
<td>2018</td>
<td>76</td>
<td>2018-059</td>
<td>Continue to Improve Database Security</td>
<td>N/A</td>
<td>-</td>
<td>VEC</td>
<td>Corrective Action is ongoing</td>
<td>See Finding Number 2018-059</td>
<td>This finding was repeated in the APA’s FY18 audit, therefore this finding is being closed and tracked in finding number 2018-059.</td>
</tr>
</tbody>
</table>

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</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>60</td>
<td>2017-039</td>
<td>Continue to Improve Database Security</td>
<td>N/A</td>
<td>-</td>
<td>VEC</td>
<td>Corrective Action is ongoing</td>
<td>See Finding Number 2018-059</td>
<td>No significant difference.</td>
</tr>
</tbody>
</table>

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</thead>
<tbody>
<tr>
<td>2016</td>
<td>29</td>
<td>2016-014</td>
<td>Continue Improving Database Security</td>
<td>17.225</td>
<td>-</td>
<td>VEC</td>
<td>Corrective Action is ongoing</td>
<td>See Finding Number 2017-039</td>
<td>No significant difference.</td>
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</table>

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<tbody>
<tr>
<td>2015</td>
<td>13</td>
<td>2015-004</td>
<td>Improve Database Security</td>
<td>17.225</td>
<td>-</td>
<td>VEC</td>
<td>Corrective Action is ongoing</td>
<td>See Finding Number 2016-014</td>
<td>No significant difference.</td>
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### Fiscal Year 2018

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>77</td>
<td>2018-061</td>
<td>Complete IT Risk Assessments and Define System Boundaries</td>
<td>N/A</td>
<td>-</td>
<td>VEC</td>
<td>Corrective Action is completed</td>
<td>See Finding Number 2018-061</td>
<td>No significant difference.</td>
</tr>
</tbody>
</table>

### Fiscal Year 2017

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</thead>
<tbody>
<tr>
<td>2017</td>
<td>58</td>
<td>2017-038</td>
<td>Risk Management and Contingency Planning Documentation</td>
<td>N/A</td>
<td>-</td>
<td>VEC</td>
<td>Corrective Action is completed</td>
<td>See Finding Number 2018-061</td>
<td>No significant difference.</td>
</tr>
</tbody>
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</thead>
<tbody>
<tr>
<td>2016</td>
<td>78</td>
<td>2017-058</td>
<td>Continue to Improve Oversight over IT Risk Assessments</td>
<td>N/A</td>
<td>-</td>
<td>VEC</td>
<td>Corrective Action is completed</td>
<td>See Finding Number 2018-061</td>
<td>No significant difference.</td>
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</table>

### Fiscal Year 2015

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>2015</td>
<td>44</td>
<td>2015-040</td>
<td>Continue Improving Oversight over IT Risk Assessments and Security Audits</td>
<td>17.225</td>
<td>-</td>
<td>VEC</td>
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<td>See Finding Number 2016-056</td>
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</table>

### Fiscal Year 2014

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### Fiscal Year 2017

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<th>Current Status</th>
<th>Significant Differences Between Previously Reported Corrective Action</th>
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</thead>
<tbody>
<tr>
<td>2017</td>
<td>72</td>
<td>2017-052</td>
<td>Evaluate, Revise, and Implement the Change Management Process</td>
<td>N/A</td>
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<td>VEC</td>
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### Fiscal Year 2017

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<th>Significant Differences Between Previously Reported Corrective Action</th>
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</thead>
<tbody>
<tr>
<td>2017</td>
<td>81</td>
<td>2017-061</td>
<td>Continue to Upgrade Unsupported Technology</td>
<td>N/A</td>
<td>-</td>
<td>VEC</td>
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<td>See Finding Number 2017-061</td>
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### Fiscal Year 2016

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<tr>
<td>2016</td>
<td>54</td>
<td>2016-097</td>
<td>Upgrade Unsupported Technology</td>
<td>17.225</td>
<td>-</td>
<td>VEC</td>
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<td>No significant difference.</td>
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### For Previous Findings Not Corrected or Partially Corrected

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<tr>
<td>2016</td>
<td>39</td>
<td>2016-024</td>
<td>Document Separation of Duties of Individuals for Mission Critical Systems</td>
<td>17.225</td>
<td>-</td>
<td>VEC</td>
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<tr>
<td>2016</td>
<td>70</td>
<td>2016-050</td>
<td>Improve Change Management Process</td>
<td>17.225</td>
<td>-</td>
<td>VEC</td>
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<tr>
<td>2016</td>
<td>87</td>
<td>2016-065</td>
<td>Continue to Improve Physical and Environmental Security</td>
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<td>-</td>
<td>VEC</td>
<td>Resolved - Corrective action is completed</td>
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<tr>
<td>2015</td>
<td>62</td>
<td>2015-057</td>
<td>Obtain Approval to Use End-of-Life Operating Systems</td>
<td>17.225</td>
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<td>VEC</td>
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**Department of Education - Central Office Operations and Direct Aid to Public Education**

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<tbody>
<tr>
<td>2018</td>
<td>19</td>
<td>2018-004</td>
<td>Implement Separation of Duties over VPSA Education Technology Grant Payments</td>
<td>N/A</td>
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<tr>
<td>2018</td>
<td>21</td>
<td>2018-005</td>
<td>Continue to Improve Support and Review of Financial Recording</td>
<td>N/A</td>
<td>-</td>
<td>DOE/COO</td>
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<tr>
<td>2018</td>
<td>22</td>
<td>2018-006</td>
<td>Use Secure Local Division Data</td>
<td>N/A</td>
<td>-</td>
<td>DOE/COO</td>
<td>Resolved - Corrective action is completed</td>
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<tr>
<td>2018</td>
<td>36</td>
<td>2018-019</td>
<td>Ensure Consistent Recording of Receivables</td>
<td>N/A</td>
<td>-</td>
<td>DOE/COO</td>
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<td></td>
<td></td>
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<tr>
<td>2018</td>
<td>74</td>
<td>2018-057</td>
<td>Continue Improving Database Security</td>
<td>N/A</td>
<td>-</td>
<td>DOE/COO</td>
<td>Corrective action is ongoing Final report on implementation of actions</td>
<td>DOE will resolve the outstanding deficiency of monitoring of highly privileged user access by implementing security services that are to be made available to Executive Branch agencies via VITA's Master Services Agreement in CY2019.</td>
<td>Resource constraints, Strategic Planning Adjustments, Technical Issues.</td>
<td>The APA has recognized that Education has resolved five out of six control weaknesses identified in the fiscal year 2017 audit. DOE expects to resolve the outstanding deficiency of monitoring of highly privileged user access by utilizing VITA’s recently released solution.</td>
<td></td>
</tr>
</tbody>
</table>

**FISCAL YEAR 2019**
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</thead>
<tbody>
<tr>
<td>2018</td>
<td>79</td>
<td>2018-063</td>
<td>Improve Vulnerability Scanning Process</td>
<td>N/A</td>
<td>-</td>
<td>DOE/COO</td>
<td>Corrective action is ongoing</td>
<td>DOE has implemented quarterly internal vulnerability scanning to internal-facing sensitive systems. The APA has stated their intent to verify quarterly internal vulnerability scanning and supporting documentation during the next audit cycle. Employee turnover and resource constraints at the agency.</td>
<td>DOE has engaged an information security consultant who worked with VITA to begin reviewing and addressing vulnerabilities. DOE has fully addressed the gap that was discovered. Vulnerability scanning occurs on a weekly basis, soon to be ongoing via agent based scanning, and is reviewed and managed by the information security office at the agency.</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>84</td>
<td>2018-068</td>
<td>Improve the IT Security Awareness Training Process</td>
<td>N/A</td>
<td>-</td>
<td>DOE/COO</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
<td></td>
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<tr>
<td>2017</td>
<td>82</td>
<td>2017-062</td>
<td>Continue to Improve Information Security Program and IT Governance</td>
<td>N/A</td>
<td>-</td>
<td>DOE/COO</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
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<tr>
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<td>56</td>
<td>2016-039</td>
<td>Improve Information Security Program and IT Governance</td>
<td>N/A</td>
<td>-</td>
<td>DOE/COO</td>
<td>See Finding Number 2017-062</td>
<td></td>
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<tr>
<td>2015</td>
<td>42</td>
<td>2015-039</td>
<td>Continue to Improve IT Risk Management</td>
<td>N/A</td>
<td>-</td>
<td>DOE/COO</td>
<td>See Finding Number 2016-039</td>
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<tr>
<td>2014</td>
<td>35</td>
<td>2014-020</td>
<td>Improve IT Risk Management Documentation</td>
<td>N/A</td>
<td>-</td>
<td>DOE/DAPE</td>
<td>See Finding Number 2015-039</td>
<td></td>
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<tr>
<td>2015</td>
<td>52</td>
<td>2015-048</td>
<td>Improve Information Security Awareness Training Program</td>
<td>N/A</td>
<td>-</td>
<td>DOE/COO</td>
<td>See Finding Number 2016-039</td>
<td></td>
<td></td>
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<tr>
<td>2017</td>
<td>109</td>
<td>2017-086</td>
<td>Drawdown Federal Grant Funds as Instructed and Update Loan Request with Important Facts</td>
<td>N/A</td>
<td>-</td>
<td>DOE/COO</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
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</table>

University of Virginia - Academic Division and Medical Center

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<tbody>
<tr>
<td>2018</td>
<td>31</td>
<td>2018-034</td>
<td>Improve Bank Reconciliation Policies and Procedures</td>
<td>N/A</td>
<td>-</td>
<td>UVAH</td>
<td>Resolved - Corrective action is completed</td>
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<tr>
<td>2018</td>
<td>32</td>
<td>2018-035</td>
<td>Improve Revenue Recognition for Non-reimbursement Grants</td>
<td>N/A</td>
<td>-</td>
<td>UVA/AD</td>
<td>Resolved - Corrective action is completed</td>
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<tr>
<td>2018</td>
<td>48</td>
<td>2018-029</td>
<td>Improve Database Security</td>
<td>N/A</td>
<td>-</td>
<td>UVA/AD</td>
<td>Resolved - Corrective action is completed</td>
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<td>2018</td>
<td>49</td>
<td>2018-030</td>
<td>Improve Wireless Local Area Network Security</td>
<td>N/A</td>
<td>-</td>
<td>UVAH</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
<td></td>
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<tr>
<td>2018</td>
<td>63</td>
<td>2018-044</td>
<td>Improve Patient Accounting, Billing, and Management System Segregation of Duties</td>
<td>N/A</td>
<td>-</td>
<td>UVAH</td>
<td>Corrective action is ongoing</td>
<td>In response to Internal Audit findings, UVAH convened a joint task force of Separation of Duty stakeholders and owner that consisted of members from Finance</td>
<td>Corrective Action is ongoing. UVAH continues to implement the processes in order to demonstrate appropriate segregation of duties within the Patient Billing system, therefore strengthening internal controls within UVAH while minimizing risk.</td>
<td>No significant differences.</td>
</tr>
</tbody>
</table>
### Corrective Action and Applicable Deliverables

<table>
<thead>
<tr>
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<td></td>
<td>Reason for Recurrence</td>
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<tr>
<td>2018</td>
<td>66</td>
<td>2018-048</td>
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<td>UVAH</td>
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<td>2017</td>
<td>67</td>
<td>2017-047</td>
<td>N/A</td>
<td>-</td>
<td>UVAH</td>
<td>See Finding Number 2018-048</td>
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<td>2018</td>
<td>67</td>
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<td>2018</td>
<td>78</td>
<td>2018-062</td>
<td>N/A</td>
<td>-</td>
<td>UVAH</td>
<td>Resolved - Corrective action is completed</td>
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</table>

Revenue Cycle Leadership, UVAHS Revenue Cycle Joint Operating Team (JOT), Training and Development, Epic Revenue Cycle Application, and Information Technology (IT) Security to review the recommendations and develop plans for each of the findings. The action plans were written to address each finding and recommendations noted in the Internal Comprehensive action plan that included but were not limited to the following objectives: Review and understanding of the Observations and Recommendations, develop an informed Management Response and Corrective action plan, develop a risk matrix by key functional areas, validate existing templates provisioning and controls, identify gaps, and establish mitigation plans. Ongoing meetings and discussions have occurred with the UVAHS Internal Audit team in the development of the corrective action plan with goal. As part of these discussions, the Audit team was informed of organization intent to establish an SOD Quarterly Oversight group to review progress. These processes might include policy changes, procedure changes, and a review of new and existing controls. The notes from those meetings will be shared with the Chief Information Officer and Chief Financial Officer.
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<tbody>
<tr>
<td>2017</td>
<td>60</td>
<td>2017-040</td>
<td>Improve IT Risk Management Process and Documentation</td>
<td>N/A</td>
<td>-</td>
<td>UVAH</td>
<td>See Finding Number 2018-062</td>
<td>Reason for Recurrence: N/A; Corrective Action Taken to Date: See Finding Number 2018-062; Significant Differences Between Previously Reported Corrective Action: N/A</td>
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<tr>
<td>2018</td>
<td>83</td>
<td>2018-067</td>
<td>Improve Security Awareness Training Program</td>
<td>N/A</td>
<td>-</td>
<td>UVA/AD</td>
<td>Corrective action is ongoing</td>
<td>The University will update existing policies to address periodic security training and ensure that additional role-based training is included and implement a process to monitor completions and enforce compliance. As part of the SecureUVA program (formerly named the Security Enhancement Program), the University will update all IT security policies, standards, and guidelines. The requirement for security training, as well as more periodic training updates, will be covered in these updated standards. This project has and will be completed by June 30, 2017. The university will also develop methods to track and enforce compliance as part of a second SecureUVA project. This project will be scoped to update the current training materials and training system, which will help track and enforce training requirements. This project is scheduled to begin in March 2017 and will be completed by December 29, 2017. Satisfactory progress noted, but corrective action remains in progress. In response to the initial finding, the University updated its policies to address periodic security training and implemented a process to monitor completion and ensure compliance with that policy. After the last review by the APA, the University will make additional updates to reflect its risk-based approach to security training that focuses compliance efforts on personnel with access to highly sensitive data.</td>
</tr>
<tr>
<td>2017</td>
<td>88</td>
<td>2017-067</td>
<td>Improve Security Awareness Training Program</td>
<td>N/A</td>
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<td>See Finding Number 2018-067</td>
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<td>2016</td>
<td>84</td>
<td>2016-063</td>
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<td>UVA/AD</td>
<td>See Finding Number 2017-067</td>
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<td>117</td>
<td>2018-101</td>
<td>Improve Compliance over Enrollment Reporting</td>
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<tr>
<td>2018</td>
<td>117</td>
<td>2018-102</td>
<td>Properly Process Return of Title IV Calculations</td>
<td>Student Financial Assistance Programs Cluster</td>
<td>-</td>
<td>UVA/AD</td>
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<tr>
<td>2018</td>
<td>117</td>
<td>2018-103</td>
<td>Improve Notification of Awards to Students</td>
<td>Student Financial Assistance Programs Cluster</td>
<td>-</td>
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<td>FISCAL YEAR 2019 MANAGEMENT'S SECTION</td>
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<td>62</td>
<td>2017-041</td>
<td>Improve Database Security</td>
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<td>-</td>
<td>UVAH</td>
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<td>2017-070</td>
<td>Improve Terminated Employee Procedures</td>
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<td>UVA/AD</td>
<td>Resolved - Corrective action is completed</td>
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<tr>
<td>2017</td>
<td>96</td>
<td>2017-075</td>
<td>Comply with Commonwealth Requirements for Wage Employees</td>
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<td>-</td>
<td>UVA/AD</td>
<td>Resolved - Corrective action is completed</td>
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**Virginia Commonwealth University**

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<td>70</td>
<td>2018-052</td>
<td>Improve Continuity Planning Documentation</td>
<td>N/A</td>
<td>-</td>
<td>VCU/AD</td>
<td>Resolved - Corrective action is completed</td>
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<tr>
<td>2017</td>
<td>77</td>
<td>2017-057</td>
<td>Improve Risk Management and Continuity Planning</td>
<td>N/A</td>
<td>-</td>
<td>VCU/AD</td>
<td>See Finding Number 2018-052</td>
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<tr>
<td>2018</td>
<td>94</td>
<td>2018-077</td>
<td>Comply with Commonwealth Requirements for Wage Employees</td>
<td>N/A</td>
<td>-</td>
<td>VCU/AD</td>
<td>Resolved - Corrective action is completed</td>
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<tr>
<td>2017</td>
<td>95</td>
<td>2017-074</td>
<td>Comply with Commonwealth Requirements for Wage Employees</td>
<td>N/A</td>
<td>-</td>
<td>VCU/AD</td>
<td>See Finding Number 2018-077</td>
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<tr>
<td>2018</td>
<td>102</td>
<td>2018-085</td>
<td>Improve Timeliness of the Commonwealth’s Retirement Benefits System Reconciliation Process</td>
<td>N/A</td>
<td>-</td>
<td>VCU/AD</td>
<td>Resolved - Corrective action is completed</td>
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<tr>
<td>2018</td>
<td>117</td>
<td>2018-101</td>
<td>Improve Compliance over Enrollment Reporting Student Financial Assistance Programs Cluster</td>
<td>Student</td>
<td>-</td>
<td>VCU/AD</td>
<td>Corrective action is ongoing</td>
<td>To ensure that unofficial withdrawal enrollment updates are reported accurately and timely to NSLDS, the Office of Financial Aid will perform manual enrollment updates to NSLDS for all students who have withdrawn without official notification during a term/semester. This step has been added to the existing Return of Title IV procedure and will begin implementation at the conclusion of the fall 2018 term/semester. To rectify the graduation status finding, the Office of Records and Registration is sending amended enrollment files to the National Student Clearinghouse (NSC) to update the NSLDS. The office has also added a supplementary enrollment report for graduates only to the transmission schedule provided to the NSC each semester. In addition, quality control reviews will be conducted in collaboration with staff from the Offices of Financial Aid and Records and Registration at the end of each FISCAL YEAR.</td>
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### Corrective Action and Applicable Deliverables for Previous Findings Not Corrected or Partially Corrected

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<tr>
<td>2017</td>
<td>71</td>
<td>2017-051</td>
<td>Implement Newly Developed Policies over Information Technology Third-Party Service Providers</td>
<td>N/A</td>
<td>-</td>
<td>VCU/AD</td>
<td>Resolved - Corrective action is completed</td>
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<td>66</td>
<td>2016-046</td>
<td>Improve Oversight of Information Technology Third-Party Service Providers</td>
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<td>VCU/AD</td>
<td>Resolved - Corrective action is completed</td>
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<td>Virginia Polytechnic Institute and State University</td>
<td>2018</td>
<td>117</td>
<td>Improve Compliance over Enrollment Reporting</td>
<td>N/A</td>
<td>-</td>
<td>VPISU/ID</td>
<td>Corrective action is ongoing</td>
<td></td>
<td>VPISU/ID has met with the National Student Clearinghouse and will begin providing a separate file to the Clearinghouse to ensure records are reported. The production of this file, testing with the National Student Clearinghouse, and creation of an auditing process will be completed.</td>
<td>The programs and processes were implemented in production, but it was not possible to retroactively correct FY 2019 data. Therefore, the APA could not test to determine if the correction was effectively implemented and said this comment would have to be continued into FY 2020.</td>
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<td>Department of Accounts</td>
<td>2018</td>
<td>68</td>
<td>Review and Document Service Organization Control Reports of Third-Party Service Providers</td>
<td>N/A</td>
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<td>DOA</td>
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<td>Strengthen Access Controls</td>
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<td>See Finding Number 2018-031</td>
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<td>2018-032</td>
<td>Continue to Improve Service Account Management</td>
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<td>Improve Controls over Workgroups</td>
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<td>2018-034</td>
<td>Improve Effectiveness of the Access Termination Process</td>
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<td>2018</td>
<td>54</td>
<td>2018-035</td>
<td>Improve Controls over Role Access</td>
<td>N/A</td>
<td>-</td>
<td>TAX</td>
<td>Corrective action is ongoing</td>
<td>Before the next access certification in June 2019, Virginia Tax will complete a project that identifies combinations of access functions that create potential segregation-of-duty violations. We will communicate the results to management so that they can make and document an informed decision regarding whether to address the potential conflict in the access control process or rely on other compensating controls. Virginia Tax will also recommunicate to all supervisors that during the access request and recertification process they must approve only the access that constitutes least privilege for an employee’s current need.</td>
<td>Corrective Action is ongoing. Prior to the AR re-certification the team researched, reviewed, and documented resources and roles that were separation of duty conflicts. Team met with role owners concerning separation of duty conflicts and the concept of least privilege. Team documented the role owners justification and their acceptance for the responsibility for the separation of duty conflicts and least privilege for the resources and roles they required to perform their duties. The AR Re-certification application reflects and documents the duty conflicts and least privilege and requires role owners to review conflicts and accept responsibility.</td>
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<td>2018</td>
<td>74</td>
<td>2018-056</td>
<td>Improve Disaster Recovery Planning Documentation</td>
<td>N/A</td>
<td>-</td>
<td>TAX</td>
<td>Corrective action is ongoing</td>
<td>General Services Manager to distribute email to preparers of COOP plan describing the APA comment and plan of action to address issues.</td>
<td>Corrective Action is ongoing. General Services Manager has distributed email to preparers of COOP plan describing the APA comment and plan of action to address issues. Internal Audit Director discussed plan of action at next LT. General Services Manager distributed COOP to VDEM and Tax management by March 31, 2019 to hit VDEM due date. Business Impact Analysis was revised. Due dates after April 31, 2019 have been pushed back 60 days to allow for a more complete and accurate product July 12, 2019, a meeting was held where the accuracy of this target date was confirmed.</td>
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<td>2017-020</td>
<td>Address Uncorrelated Accounts</td>
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<td>Improve Documentation over Financial Reporting System Security Functions and Features</td>
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<td>Perform Annual Access Review</td>
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<td>2018</td>
<td>27</td>
<td>2018-010</td>
<td>Improve Accounting and Financial Reporting Control Environmental of Trust Accounting</td>
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<td>-</td>
<td>TD</td>
<td>Corrective action is ongoing</td>
<td>With the recent addition of a Senior Management position in Trust Accounting, Treasury will place continued emphasis on succession planning, and make cross-training within the Trust Accounting Unit a key priority. Where possible, Treasury will focus on streamlining its accounting and reporting processes.</td>
<td>Because the budget authorizing the hiring of a senior management position for Trust Accounting was not approved until later in calendar 2018, Treasury was not able to hire this position until September of 2018 during the year-end reporting cycle. Senior management position has been hired and is being trained on responsibilities and being cross-training on other Trust Accounting responsibilities. No significant differences.</td>
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<td>2017-008</td>
<td>Improve Accounting and Financial Reporting Control Environment of Trust Accounting</td>
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<td>2016-007</td>
<td>Maintain Adequate Staffing in Accounting and Reporting Functions</td>
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<td>2018-011</td>
<td>Improve Financial Reporting of Unclaimed Property Activity</td>
<td>N/A</td>
<td>-</td>
<td>TD</td>
<td>Corrective action is ongoing</td>
<td>The Unclaimed Property Division (UCP) will improve its procedures to ensure the financial statements are completed in accordance with the instructions provided by DOA, as well as Generally Accepted Accounting Principles.</td>
<td>Additional documentation, supporting schedules and procedures have been developed based on prior year experience to assist with the preparation for FY 2019, with a pre-submission audit scheduled.</td>
<td>Developed enhanced documentation and procedures based on experience and reporting deficiencies in prior years.</td>
</tr>
<tr>
<td>2018</td>
<td>29</td>
<td>2018-012</td>
<td>Document Risk Management Procedures and Improve Quality of Data Provided to Actuary</td>
<td>N/A</td>
<td>-</td>
<td>TD</td>
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<td>60</td>
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<td>Improve Information System Access Controls</td>
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<td>2017</td>
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<td>Improve Database Security</td>
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<td>-</td>
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**Department of Behavioral Health and Developmental Services**

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<tr>
<td>2018</td>
<td>30</td>
<td>2018-013</td>
<td>Improve Controls over Financial Reporting</td>
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<td>2018</td>
<td>46</td>
<td>2018-027</td>
<td>Improve Application Security</td>
<td>N/A</td>
<td>-</td>
<td>DBHDS</td>
<td>Corrective action is ongoing</td>
<td>DBHDS will immediately move the central administrator to a team of existing application support administrators to provide better support and continuity of operations through cross training. Additional action plans will be developed and implemented by July 1, 2019.</td>
<td>Corrective Action is ongoing. Generic application procedures have been developed. DBHDS Information Security is currently conducting a risk assessment of the application.</td>
<td>Resource constraints continue. Procedures have been developed. Risk Assessment is ongoing.</td>
</tr>
<tr>
<td>2018</td>
<td>57</td>
<td>2018-038</td>
<td>Improve Access Controls over the Internal Accounting System</td>
<td>N/A</td>
<td>-</td>
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<td>Corrective action is ongoing</td>
<td>DBHDS will improve access controls by October 1, 2019. This will include continuing to conduct security monitoring activities at all regions and facilities and ensuring they are sufficiently documented.</td>
<td>Corrective Action is ongoing. DBHDS is using an application to ensure proper access controls.</td>
<td>Implementation of application.</td>
</tr>
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<td>2018</td>
<td>58</td>
<td>2018-039</td>
<td>Develop and Implement Compliant Application Access Management Procedures</td>
<td>N/A</td>
<td>-</td>
<td>DBHDS</td>
<td>Corrective action is ongoing</td>
<td>DBHDS will work with its facilities to ensure their procedures match the Agency’s existing Policy. This will be completed by July 1, 2019.</td>
<td>Corrective Action is ongoing.</td>
<td>DBHDS is using an application to ensure proper access controls.</td>
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<tr>
<td>2018</td>
<td>71</td>
<td>2018-053</td>
<td>Improve IT Contingency Management Program</td>
<td>N/A</td>
<td>-</td>
<td>DBHDS</td>
<td>Corrective action is ongoing</td>
<td>DBHDS is changing the infrastructure to a more cloud based architecture which will provide greater availability of resources. This change is based on approved cloud based funding. Continuity of Operations Plans and Disaster Recovery Plans are changing to support the new infrastructure and will be completed by October 1, 2019.</td>
<td>Infrastructure changes related to Executive Order 19.</td>
<td>DBHDS has started an IT COOP / DRP project with a projected completion date of April 1, 2020. This project will develop procedures, assign roles and responsibilities, and update the IT COOPs and DRPs ensuring they are consistent across the agency. DBHDS will ensure these IT COOPs and DRPs are tested annually. DBHDS is currently engaging Unisys on cost estimates for the COOP and DRPs for affected servers. In addition, part of the Contingency Management Program planning at DBHDS is the continued movement to Cloud Storage. DBHDS IT Security has identified the servers that need to be updated and the related costs were sent to VITA.</td>
</tr>
<tr>
<td>2017</td>
<td>86</td>
<td>2017-065</td>
<td>Improve IT Contingency Management Program</td>
<td>N/A</td>
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<td>See Finding Number 2018-053</td>
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<td>2018</td>
<td>80</td>
<td>2018-064</td>
<td>Develop Baseline Configurations for Information Systems</td>
<td>N/A</td>
<td>-</td>
<td>DBHDS</td>
<td>Corrective action is ongoing</td>
<td>DBHDS has baseline configurations for hardware, and we are completing the baseline configurations for software requirements. This will be completed by October 1, 2019.</td>
<td>DBHDS was dependent on NG providing servers and software. NG had substantial delays in completing their tasks.</td>
<td>DBHDS has upgraded the operating system of 52 servers. DBHDS is developing baselines for the upgraded applications present on these servers. DBHDS plans to complete the installation of server software by March 31, 2018, which will establish and maintain security baseline configurations for our sensitive information systems. This software will ensure we meet the requirements of the Commonwealth’s Security Standards. Servers, and software, have been configured. DBHDS has baseline configurations for hardware, and DBHDS is in the process of completing the baseline configurations for software requirements. An estimated completion date is October 1, 2019.</td>
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<td>Develop Baseline Configurations for Information Systems</td>
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<td>Develop Baseline Configurations for Information Systems</td>
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<td>2015-005</td>
<td>Develop Baseline Configurations for Information Systems</td>
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<td>2018-070</td>
<td>Continue to Upgrade Unsupported Technology</td>
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<td>Continue to Upgrade Unsupported Technology</td>
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<td>2015-056</td>
<td>Upgrade Unsupported Technology</td>
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<td>2018</td>
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<td>2018-072</td>
<td>Improve Controls over Payroll</td>
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<td>2016</td>
<td>98</td>
<td>2016-076</td>
<td>Improve Controls over Payroll</td>
<td>N/A</td>
<td>-</td>
<td>DBHDS</td>
<td>See Finding Number 2017-072</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>92</td>
<td>2015-088</td>
<td>Improve Controls over Payroll</td>
<td>N/A</td>
<td>-</td>
<td>DBHDS</td>
<td>See Finding Number 2016-076</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>90</td>
<td>2018-073</td>
<td>Comply with Employment Eligibility Requirements</td>
<td>N/A</td>
<td>-</td>
<td>DBHDS</td>
<td>Corrective action is ongoing</td>
<td>DBHDS will ensure all facility Human Resources staff are trained on employment eligibility requirements, on how to fill out the I9, and on how to use E-verify. It should be noted that training was offered to staff in December 2018. Corrective actions will be completed by March 1, 2019.</td>
<td>No significant differences.</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>91</td>
<td>2018-074</td>
<td>Comply with 1,508 Hour Rule for Wage Employees</td>
<td>N/A</td>
<td>-</td>
<td>DBHDS</td>
<td>Corrective action is ongoing</td>
<td>DBHDS will ensure all of its facility Human Resources offices track the 1,508 hour rule for wage employees. This has already been corrected at the facilities involved with the finding, and information will be sent to Human Resources staff at all facilities with reminders of the rule and how to track wage hours. This will be completed by March 1, 2019.</td>
<td>No significant differences.</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>92</td>
<td>2018-075</td>
<td>Improve Controls Surrounding At-Will Employees</td>
<td>N/A</td>
<td>-</td>
<td>DBHDS</td>
<td>Resolved - Corrective action is completed</td>
<td>The FY19 APA testing noted one exception at Western State Hospital. The exception could have been prevented as controls worked appropriately, but a staffing decision was made to have an employee exceed their limit by a few hours. This is considered a performance issue and not a control issue by the agency.</td>
<td>Tracking handled by both HR, Fiscal and department heads to ensure that wage employees do not exceed the 1500 threshold. No significant differences.</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>96</td>
<td>2018-080</td>
<td>Improve Controls over the Purchasing Process</td>
<td>N/A</td>
<td>-</td>
<td>DBHDS</td>
<td>Corrective action is ongoing</td>
<td>The Fiscal Director at the applicable DBHDS facility will review the relevant CAPP Manual policies and procedures for the receipt of goods and services with</td>
<td>Each of the corrective action items were implemented and tested through June 2019. No significant differences.</td>
<td></td>
</tr>
</tbody>
</table>
Applicable Accounts Payable personnel and backups. Expenditure voucher samples will be pulled once a month for the period January through June 2019 to monitor compliance with CAPP Manual regulations. Expenditure audits will also be conducted during the FY 2019 ARMICS Internal Controls Review and Testwork. In August 2018, Fiscal and Procurement staff at the facility discovered the exception noted and “self-corrected” to comply with a new procurement regulation issued under Procurement Information Memoranda 98-034 dated July 1, 2017. Prior to the corrective action, the facility was not compliant with Memoranda 98-034 because Fiscal Staff were not forwarding purchase orders for eVA exempt vendors for medical services and prescription drugs to Procurement personnel to enter into eVA. To ensure future compliance, Fiscal personnel will meet with Procurement personnel to review the requirements of Memoranda 98-34 and any subsequent updates. Medical Services and prescription drug expenditure samples will be pulled once a month for the period January through June 2019 to monitor compliance. Medical Services and Prescription Drug purchases will also be reviewed during the FY 2019 ARMICS Internal Controls Review and Testwork.

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</thead>
<tbody>
<tr>
<td>2018</td>
<td>99</td>
<td>2018-083</td>
<td>Improve Controls over the Commonwealth’s Retirement Benefits System</td>
<td>N/A</td>
<td>-</td>
<td>DBHDS</td>
<td>Corrective action is ongoing</td>
<td>All facilities have the identical policy; however, it is not always being followed properly. DBHDS will work with its facilities to ensure all employees are trained on the procedures.</td>
</tr>
</tbody>
</table>

The APA found that policies and procedures did not cover all the aspects they wanted and that some reconciliations had not been done timely or completely. There was also an issue with deleting access to VNAV timely. Policies and procedures have been standardized for DBHDS facilities and Central Office. The access issue has been corrected. A revised VNAV reconciliation policy/procedure was sent out to all DBHDS HR managers on October 25, 2017. All DBHDS facilities submitted their revised VNAV reconciliation procedures by December 14, 2017. Training on the VNAV reconciliation was held on December 14, 2017. The VNAV reconciliation will be added to the ARMICS work completed by all DBHDS.

The FY 2018 Payroll audits performed by APA and Internal Audit showed some VNAV reconciliation deficiencies are still occurring at some facilities. While all DBHDS facilities now have policies and procedures in place, it appears they are not always being properly followed. DBHDS will work with its facilities to ensure all employees are trained on the procedures.
### FINANCIAL STATEMENT FINDINGS

- **VNAV Reconciliation procedures** have been received from all DBHDS facilities. These documents are being reviewed to ensure that they include all necessary steps in the reconciliation process.
- **Update:** FY 2018 Payroll audits performed by APA and Internal Audit showed some VNAV Reconciliation deficiencies are still occurring at some facilities. While all DBHDS facilities now have policies and procedures in place, it appears they are not always being properly followed. DBHDS will work with its facilities to ensure all employees are trained on the procedures.

### Department of Health

#### 2017
- **98 2017-077 Improve Controls Over the Commonwealth’s Retirement Benefits System**
  - CFDA No.: N/A
  - State Agency: DBHDS
  - Current Status: See Finding Number 2018-083

#### 2016
- **89 2016-068 Improve Controls over myVRS Navigator**
  - CFDA No.: N/A
  - State Agency: DBHDS
  - Current Status: See Finding Number 2017-077

#### 2015
- **85 2015-081 Improve Controls over the myVRS Navigator System**
  - CFDA No.: N/A
  - State Agency: DBHDS
  - Current Status: See Finding Number 2016-068

#### 2014
- **105 2014-063 Improve Controls Over VNAV**
  - CFDA No.: N/A
  - State Agency: DBHDS
  - Current Status: See Finding Number 2015-081

#### 2018
- **45 2018-026 Improve Web Application Security**
  - CFDA No.: N/A
  - State Agency: VDH
  - Current Status: Corrective action is ongoing
    - The VDH technical team will work with VITA and OFHS program staff to implement or enhance security controls to mitigate the risks noted by APA.
    - Reporting requirements currently being investigated. Audit Review Procedures to be developed and implemented based on this analysis. Estimated to be complete by July 31, 2019. Request has been made to VITA / Partnership to upgrade all web and applications servers to Windows 2016. Exception is on file for all database servers. Certification of hardware environment is expected by June 30, 2019. OIM staff will perform database and application installations by September 30, 2019. Vulnerability scans are conducted quarterly. Review and Remediation process is conducted based on results. Software vendor is engaged in providing specific remediation for specific items.
  - Significant Differences Between Previously Reported Corrective Action: No differences.

#### 2018
- **54 2018-036 Improve Timely Removal of Critical System Access**
  - CFDA No.: N/A
  - State Agency: VDH
  - Current Status: Corrective action is ongoing
    - OHR and the process improvement project team implemented a new Staff Separation Process as of December 17, 2018. The process includes more timely notification of staff status changes, with reports to all OHR and the process improvement project team.
    - OHR is in the process of reviewing the current procedures and implementing the necessary corrective actions to move toward compliance. OHR will evaluate and update policies and procedures, as necessary, to provide instruction for proper removal of staff that are separated or no longer need access. OHR
  - Significant Differences Between Previously Reported Corrective Action: This finding was deemed by APA as ongoing as of June 30, 2019 as a result of it being a repeat finding for the FY2019 APA Audit.
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<tbody>
<tr>
<td>2017</td>
<td>43</td>
<td>2017-024</td>
<td>Improve Timely Removal of Critical Access</td>
<td>N/A</td>
<td>-</td>
<td>VDH</td>
<td>See Finding Number 2018-036</td>
<td>Corrective action is ongoing</td>
<td>The Office of Financial Management (OFM) and the Office of Information Management (OIM) will update the procedure to include a process for all departments and local offices to complete the access review before the deadline. Also, OFM and OIM will update the procedure to include follow up steps as necessary to prevent tardy reviews.</td>
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<tr>
<td>2016</td>
<td>34</td>
<td>2016-020</td>
<td>Improve Timely Removal of Critical Access</td>
<td>N/A</td>
<td>-</td>
<td>VDH</td>
<td>See Finding Number 2017-024</td>
<td>Corrective action is ongoing</td>
<td>The Office of Financial Management (OFM) and the Office of Information Management (OIM) will update the procedure to include a process for all departments and local offices to complete the access review before the deadline. Also, OFM and OIM will update the procedure to include follow up steps as necessary to prevent tardy reviews.</td>
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<td></td>
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<tr>
<td>2015</td>
<td>31</td>
<td>2015-026</td>
<td>Improve Access Management for Critical Systems</td>
<td>N/A</td>
<td>-</td>
<td>VDH</td>
<td>See Finding Number 2016-020</td>
<td>Corrective action is ongoing</td>
<td>The Office of Financial Management (OFM) and the Office of Information Management (OIM) will update the procedure to include a process for all departments and local offices to complete the access review before the deadline. Also, OFM and OIM will update the procedure to include follow up steps as necessary to prevent tardy reviews.</td>
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<tr>
<td>2014</td>
<td>62</td>
<td>2014-038</td>
<td>Improve Access Management to Information Systems</td>
<td>N/A</td>
<td>-</td>
<td>VDH</td>
<td>See Finding Number 2015-026</td>
<td>Corrective action is ongoing</td>
<td>The Office of Financial Management (OFM) and the Office of Information Management (OIM) will update the procedure to include a process for all departments and local offices to complete the access review before the deadline. Also, OFM and OIM will update the procedure to include follow up steps as necessary to prevent tardy reviews.</td>
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<tr>
<td>2018</td>
<td>56</td>
<td>2018-037</td>
<td>Perform Financial System Access Reviews</td>
<td>N/A</td>
<td>-</td>
<td>VDH</td>
<td>Corrective action is ongoing</td>
<td>Corrective action is ongoing</td>
<td>The Office of Financial Management (OFM) and the Office of Information Management (OIM) will update the procedure to include a process for all departments and local offices to complete the access review before the deadline. Also, OFM and OIM will update the procedure to include follow up steps as necessary to prevent tardy reviews.</td>
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<tr>
<td>2018</td>
<td>69</td>
<td>2018-051</td>
<td>Perform Review of Service Organization Control Reports for Third-Party Service Providers</td>
<td>10.557</td>
<td>-</td>
<td>VDH</td>
<td>Resolved - Corrective action is completed</td>
<td>Corrective action is ongoing</td>
<td>The Office of Financial Management (OFM) and the Office of Information Management (OIM) will update the procedure to include a process for all departments and local offices to complete the access review before the deadline. Also, OFM and OIM will update the procedure to include follow up steps as necessary to prevent tardy reviews.</td>
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<tr>
<td>2018</td>
<td>73</td>
<td>2018-055</td>
<td>Improve Contingency Management Program</td>
<td>N/A</td>
<td>-</td>
<td>VDH</td>
<td>Corrective action is ongoing</td>
<td>Corrective action is ongoing</td>
<td>The Office of Financial Management (OFM) and the Office of Information Management (OIM) will update the procedure to include a process for all departments and local offices to complete the access review before the deadline. Also, OFM and OIM will update the procedure to include follow up steps as necessary to prevent tardy reviews.</td>
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<tr>
<td>2018</td>
<td>94</td>
<td>2018-078</td>
<td>Develop and Implement Policy for Monitoring Part-Time Employee Hours</td>
<td>N/A</td>
<td>-</td>
<td>VDH</td>
<td>Corrective action is ongoing</td>
<td>Corrective action is ongoing</td>
<td>The Office of Financial Management (OFM) is now timely posting the monitoring reports and will continue to do so going forward. Additionally, OFM</td>
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<tr>
<td>2018</td>
<td>111</td>
<td>Comply with Federal Requirements over High-Risk Vendors</td>
<td>10.557</td>
<td>-</td>
<td>VDH</td>
<td>Corrective action is ongoing</td>
<td>The Division of Community Nutrition (DCN) will draft updated language for the Virginia Administrative Code to address the guidance provided on high risk vendors.</td>
<td>Still in progress.</td>
<td>Language has been drafted and submitted.</td>
<td>No differences.</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>112</td>
<td>Improve Controls over WIC Information System Access</td>
<td>10.557</td>
<td>-</td>
<td>VDH</td>
<td>Corrective action is ongoing</td>
<td>The IT Support Team within DCN will distribute the WIC Crossroads Access Report on a monthly basis (10th day of every month) with a five (5) day response period for the LHDs to review the report and denote the status of LHD staff with the Crossroads System. The responses will be recorded on an Excel spreadsheet by the 16th day of every month.</td>
<td>Still in progress.</td>
<td>The WIC Crossroads Access Report process has been implemented. As an additional measure of control, requests for new or changes to Crossroads user access must be reviewed and approved by the Nutrition Education Liaison. NOTE: This finding was deemed by APA as on-going as of June 30, 2019 as a result of it being a repeat finding for the FY2019 APA Audit. VDH EPPI concurs that supervisors did not submit certifications in a timely manner. However, regarding the access to EPPIC, it is an external system VDH does not own the system and is in the process of determining if the contract will be renewed.</td>
<td>No differences.</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>113</td>
<td>Retain Documentation of WIC Financial Eligibility</td>
<td>10.557</td>
<td>-</td>
<td>VDH</td>
<td>Resolved - Corrective action is completed</td>
<td>OFHS will work with the local health departments to ensure the prescribed separation of duties logs are utilized when circumstances preclude multiple parties from being involved in eligibility determination and the issuance of benefits.</td>
<td>Still in progress.</td>
<td>Policy has been drafted for review by USDA to address this finding. Once approval is obtained a process will be developed to roll out the changes to the field.</td>
<td>No differences.</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>114</td>
<td>Ensure Adequate Separation of Duties when Certifying WIC Participants</td>
<td>10.557</td>
<td>-</td>
<td>VDH</td>
<td>Corrective action is ongoing</td>
<td>OFHS will work with the local health departments to ensure the prescribed separation of duties logs are utilized when circumstances preclude multiple parties from being involved in eligibility determination and the issuance of benefits.</td>
<td>Still in progress.</td>
<td>Policy has been drafted for review by USDA to address this finding. Once approval is obtained a process will be developed to roll out the changes to the field.</td>
<td>No differences.</td>
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<tr>
<td>2018</td>
<td>25</td>
<td>2018-009</td>
<td>Strengthen Controls over Year-End Accrual Reporting</td>
<td>N/A</td>
<td>-</td>
<td>DMAS</td>
<td>Corrective action is ongoing</td>
<td>In the time leading up to year-end financial reporting, DMAS experienced a loss of knowledgeable Fiscal staff. This resulted in the remaining skeletal staff completing both Federal and State reporting at the same time. Additionally, the Budget Division has been understaffed for several months. As a result, DMAS intends to increase staffing in the Fiscal and Budget Divisions to appropriate levels to allow for more extensive review of year-end reporting prior to submission. DMAS has already taken actions to improve staffing levels in the Fiscal Division. DMAS executive leadership has appointed an acting Fiscal Division Director. At the time of year-end reporting, the Fiscal Division Director was on extended leave, and an acting Division Director had not been appointed yet. Additionally, DMAS has created a new position in the Fiscal Division, the Fiscal Senior Advisor, to act as a back-up to the Division Director. These personnel actions will ensure that staff are ready to support the year-end financial reporting process. Still working on the Corrective Action Work Plan and have not gone through another year-end financial reporting process yet.</td>
<td>Budget division has developed a document titled &quot;Accrual Process and Timeline&quot;. This document includes meeting with Fiscal in July to review current policies and methodology as well as an agreed upon timeline. It also entails three levels of review to include: Budget Operations Manager &amp; Director, a consensus review with Fiscal and an executive level review by the CFO prior to submission to DDA. Fiscal division has updated year-end Fiscal Policies and Procedures Manual, Volume 14 – Year End and Accruals document to include coordination and review with the Budget Division no later than July, as well as, final executive level review by the CFO prior to submission to DDA. No differences from previously reported CAWP.</td>
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Department of Medical Assistance Services

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<tbody>
<tr>
<td>2018</td>
<td>115</td>
<td>2018-098</td>
<td>Comply with Virginia Administrative Code Requirements for Above-50 Percent Vendors</td>
<td>10.557</td>
<td>-</td>
<td>VDH</td>
<td>Corrective action is ongoing</td>
<td>VDH will draft updates to the Virginia Administrative Code to follow the federal regulations to review new applicants within the first 6 months of authorization to validate that they are not a 50 percent vendor. Still in progress.</td>
<td>Language has been drafted and submitted. No differences.</td>
</tr>
<tr>
<td>2018</td>
<td>116</td>
<td>2018-099</td>
<td>Develop Procedures to Ensure Price Limits Are Accurately Recorded</td>
<td>10.557</td>
<td>-</td>
<td>VDH</td>
<td>Corrective action is ongoing</td>
<td>The Division of Community Nutrition (DCN) will need to collaborate with our Crossroads MIS contractor, DXC, investigate this programming issue, determine the issue that was observed, and build controls. The problem has been reported the problem to our MIS contractor. We (DCN) have discontinued the issuance of yogurt until this issue is addressed. Still in progress.</td>
<td>DXC has been made aware of the issue and are researching. No differences.</td>
</tr>
</tbody>
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FISCAL YEAR 2019

MANAGEMENT'S SECTION | 154
Corrective Action and Applicable Deliverables
For Previous Findings Not Corrected or Partially Corrected

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<tbody>
<tr>
<td>2018</td>
<td>34</td>
<td>2018-017</td>
<td>Continue Improving the Accounts Receivable Collection Process</td>
<td>-</td>
<td>DMAS</td>
<td>Corrective action is ongoing</td>
<td>The untimely processing of accounts receivable (AR) transactions is directly associated with the use of manual processes to set up AR transactions. The volume of cases in the AR area are greater than what current staffing levels in that area are able to handle manually. The Fiscal Division has taken action to increase staffing levels in the AR Unit, and will soon be implementing a new system that will allow for automation of some components of the AR process, that will decrease the amount of time required for each AR transaction. Workflow Process Improvement: The Program Integrity (PI) Division partnered with the Information Management (IM) Division to leverage Medicaid Enterprise Systems (MES) to meet their needs with case management and analytics. PI is introducing a new system that will serve as an analytical tool to manage cases. When FADS goes live, Fiscal will partner with PI to determine system enhancements that will allow for an interface between the Fiscal and PI systems.</td>
<td>Increased staffing levels in the AR Unit. Developed a new process to compile documents and refer cases to the Office of the Attorney General - Division of Debt Collection to be in compliance with OAG’s new policy.</td>
<td>Developing new processes to send proper documentation to OAG - Office of Debt Collection.</td>
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FINANCIAL STATEMENT FINDINGS are available to conduct an executive level review on year-end submissions. In addition, DMAS has hired an outside consultant to complete federal reporting work until new staff for the Federal Reporting Unit can be recruited. The outside consultant will also provide training to the new Federal Reporting staff. These actions will ensure that GL and State Reporting staff are not also tasked with federal reporting. The Budget and Fiscal Divisions will meet in early August to discuss and document the approach they are taking to estimate accruals. This early level-setting meeting will allow the divisions to mutually set a schedule and approach to accrual estimation and avoid a time-crunch in early September that can lead to errors.

2018 34 2018-017 Continue Improving the Accounts Receivable Collection Process Medicaid Cluster - DMAS Corrective action is ongoing Directly associated with the use of manual processes to set up the accounts receivable transactions. Increased staffing levels in the AR Unit. Developed a new process to compile documents and refer cases to the Office of the Attorney General - Division of Debt Collection to be in compliance with OAG’s new policy. Developing new processes to send proper documentation to OAG - Office of Debt Collection.
new system and the AR system which will further automate the member receivable process. In the meantime, Fiscal has increased staffing with temporary resources to assist with member receivables. Provider Receivables: Fiscal continues to work on improving collections for provider receivables. Fiscal added two additional resources in provider receivable in the past 12 months. Member Receivables: Fiscal added an additional resource for the member (recipient) receivable collections and now have three resources working in this area. This area is still a very manual process until PI’s system goes live. Fiscal plans to review methods that will efficiently track the receivables manually until then. Ultimately, the new system will interface with the AR system and help reduce the manual tasks.

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<td>2017</td>
<td>107</td>
<td>2017-084</td>
<td>Medicaid</td>
<td>-</td>
<td>DMAS</td>
<td>See Finding Number 2018-017</td>
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<tr>
<td>2016</td>
<td>103</td>
<td>2016-080</td>
<td>Medicaid</td>
<td>-</td>
<td>DMAS</td>
<td>See Finding Number 2017-084</td>
</tr>
<tr>
<td>2018</td>
<td>59</td>
<td>2018-040</td>
<td>Medicaid</td>
<td>-</td>
<td>DMAS</td>
<td>Corrective action is ongoing</td>
</tr>
</tbody>
</table>

OCS Access management team set up a new tracking, review, and suspend process in December 2018 to ensure timely removal of access to claims Processing System. OCS is working with HR, managers, and supervisors to have management directly notify OCS of exiting employees. HR has always notified OCS of employee terminations through the following standing operating procedures/processes: HR emails a weekly HR Infoshare - Staff Changes notification to all DMAS employees which includes OCS staff. This includes all employee terminations/ separations. For immediate discharges/terminations, the HR Director or HR Benefits and Operations Manager emails directly OCS an “Advance Notice” email to alert OCS

OCS Access management team set up a new tracking, review, and suspend process in December 2018 to ensure timely removal of access to claims Processing System. OCS is working with HR, managers, and supervisors to have management directly notify OCS of exiting employees. HR has always notified OCS of employee terminations through the following standing operating procedures/processes: HR emails a weekly HR Infoshare - Staff Changes notification to all DMAS employees which includes OCS staff. This includes all employee terminations/ separations. For immediate discharges/terminations, the HR Director or HR Benefits and Operations Manager emails directly OCS an “Advance Notice” email to alert OCS

A report view with tracking of exiting employees with status updates, date MMIS access was removed and analyst’s comments was created in K2 to help access management team. The following was provided to CMS as evidence of CAP completion on May 22, 2019:

- Copy of new tracking, review process set up by OCS in Dec. 2018, with details of exiting employees starting from Dec. 2018 to May 22, 2019. Copy of the standing operating procedures/processes outlying the notification to OCS by HR of employee terminations. Copy of the “Exit Clearance Automation Workflow process in K2”, along with a copy of the instructions sent to DMAS workforce. Documentation (email, meeting minutes, etc.) of the notification to all DMAS workforce in January of the exit clearance workflow process being implemented. No exceptions were noted from since April 2019 during the review process.

OCS and HR implemented an Exit clearance workflow process to off-boarding process. OCS also starting performing their own reviews.
Corrective Action and Applicable Deliverables

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<tr>
<td>2017</td>
<td>34</td>
<td>2017-016</td>
<td>Remove Access to the Current Claims Processing System in a Timely Manner</td>
<td>-</td>
<td>DMAS</td>
<td>Medicaid Cluster</td>
<td>Corrective action is ongoing</td>
<td>The Human Resources Division (HR) includes a reference to completion of an annual Statement of Economic Interests (SOEI) on all job postings for positions of trust. HR has also added a reference on the job posting about the required Conflict of Interest Act (COI) Training. In addition, employment offer letters state that employees in positions of trust must complete a SOEI at hire and annually thereafter. HR has also added information in employment offer letters about the COI training requirement and their responsibilities. Before new hires who will hold positions of trust start employment, HR sends an email</td>
<td></td>
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</tr>
<tr>
<td>2018</td>
<td>97</td>
<td>2018-081</td>
<td>Ensure Employees Complete Required Conflict of Interest Training</td>
<td>-</td>
<td>DMAS</td>
<td>Medicaid Cluster</td>
<td>Corrective action is ongoing</td>
<td>The reason that this is ongoing is that each required filer has a different anniversary date of when to complete the training and it is a manual process to track and ensure that the employees take the training every 2 years. The Agency Director granted permission for HR to require that all SOEI filers complete the COI training in January 2020 and annually thereafter. HR initially planned to send an email to the filers when the Ethics Counsel sends notification to complete the SOEI. However, the Ethics Counsel has not posted the 2020 training HR will notify all SOEI filers to complete the training when the 2020 training is available. HR continues to do the following with regard to Conflict of Interest Training: 1. References completion of an annual Statement of Economic Interests (SOEI) on all job postings for positions of trust 2. States in employment offer letters that employees in positions of trust must complete a SOEI at hire and annually thereafter 3. States in employment offer letters that COI training must be completed and the employee’s responsibilities 4. Sends an email to the new hire’s personal email address to inform them about the required COI training and that they will have to complete the training within the first two months of employment 5. Sent an email on January 7, 2019 as a reminder to everyone that the COI training must be completed every two years. This will be sent annually in January.</td>
<td>No differences.</td>
<td></td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>2017</td>
<td>27</td>
<td>2017-009</td>
<td>Improve Collective Knowledge of Annual Accrual Reporting</td>
<td>N/A</td>
<td>-</td>
<td>DMAS</td>
<td>Resolved - Corrective action is completed</td>
<td>to their personal email addresses (since there is no COI account yet) to inform them that they have to complete the SOEI on or before the date of employment. HR includes information in the email about the required COI training and that they will have to complete the training within the first two months of employment. HR will follow-up on all new employees designated in positions of trust to ensure they complete the required COI training within two months of hire to ensure that they complete the training. HR has continued to work with the Ethics Council Coordinator regarding issues with the database and managing DMAS' information on positions of trust. HR also works with the Ethics Council Coordinator to answer questions that DMAS filers may have when they are completing a SOEI. In December 2018, HR performed the annual update to the Disclosure System and verified that the DMAS employees, associated positions, and contact information was correct in the system. On January 7, 2019, HR emailed all filers with notice that they are responsible for taking the COI training every two years.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>33</td>
<td>2017-015</td>
<td>Develop Processes to Facilitate the Controlling of Privileges in the Claims Processing System</td>
<td>Medicaid Cluster</td>
<td>-</td>
<td>DMAS</td>
<td>Resolved - Corrective action is completed</td>
<td>6. A reconciliation is performed quarterly between the VA Learning.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>35</td>
<td>2017-017</td>
<td>Ensure Employees have Proper Access Roles within the Commonwealth's Procurement System</td>
<td>Medicaid Cluster</td>
<td>-</td>
<td>DMAS</td>
<td>Resolved - Corrective action is completed</td>
<td>6. A reconciliation is performed quarterly between the VA Learning.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>66</td>
<td>2017-046</td>
<td>Review and Document Service Organization Control Reports of Third-Party Service Providers</td>
<td>Medicaid Cluster</td>
<td>-</td>
<td>DMAS</td>
<td>Resolved - Corrective action is completed</td>
<td>6. A reconciliation is performed quarterly between the VA Learning.</td>
<td></td>
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</tr>
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**Department of Social Services**

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<tbody>
<tr>
<td>2018</td>
<td>35</td>
<td>2018-018</td>
<td>Improve the Billing Process</td>
<td>N/A</td>
<td>-</td>
<td>DSS</td>
<td>Corrective action is ongoing</td>
<td>Procedures have been put into place to submit the Medicaid bills on a timely basis. The write-up of these procedures is in progress and requirements entered in the Employee Work Profile for the position responsible. Corrective Action is ongoing.</td>
<td>No significant difference.</td>
</tr>
<tr>
<td>2018</td>
<td>44</td>
<td>2018-025</td>
<td>Improve IT Risk Management and Contingency Planning Program</td>
<td>TANF Cluster</td>
<td>-</td>
<td>DSS</td>
<td>Corrective action is ongoing</td>
<td>DSS will develop a plan to document the final five data classifications, three risk assessments, and two system security plans. Further, DSS will develop a plan to test the Continuity of Operations Plan annually through a tabletop exercise and connectivity test of IT resources. Partial repeat in 2019 APA report.</td>
<td>Completed IT contingency planning program aspect of IT risk management point.</td>
</tr>
<tr>
<td>2018</td>
<td>61</td>
<td>2018-042</td>
<td>Remove Separated Employee’s Access to Critical Systems in a Timely Manner</td>
<td>TANF Cluster</td>
<td>-</td>
<td>DSS</td>
<td>Corrective action is ongoing</td>
<td>DSS will revise the Separation and Transfer Checklist to add blank rows under the system name list for division specific access removal and non-SAMS systems. DSS will reinforce through security awareness training the Personnel Transaction Form and Separation Checklist procedures for Division Security Officer in a timely manner. DSS OD will send quarterly reminders to supervisors to complete the PTF, Separation Checklists, and transfer forms. Full repeat in 2019 APA report.</td>
<td>Virginia Department of Social Services (DSS), Department of Organizational Development (OD) and Department of Information Security and Risk Management (ISRM) concur with the above management point. ISRM has met with Organizational Development to develop a process to notify ISRM when an employee’s employment status is changing (i.e., termination or transfer). This will help ISRM ensure that access is removed when an employee leaves DSS or moves to a position that no longer requires a given system access. ISRM will use exception reports in SAMS (e.g., LDAP to Personnel Data Mismatch, Possible Employee Transfer) to identify users that may have separated or transferred, and will remove the users’ systems access. ISRM has updated the documented standard operating procedure (SOP) for terminating systems access. The SOP now identifies the system access that is not managed in SAMS (e.g., EPPIC ECC) and the corresponding State employee user groups (e.g., the Division of Child Care &amp; Early Childhood Development, Young Williams). This will help ISRM ensure access is removed for EPPIC ECC when a user separates from DSS. ISRM will perform annual access reviews for EPPIC ECC to ensure that a) user accounts belong to current DSS employees with a valid business need for access; and b) a user has only the least amount of access required to perform assigned job.</td>
</tr>
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<tr>
<td>2018</td>
<td>72</td>
<td>2018-054</td>
<td>Develop Records Retention Requirements and Processes for Case Management System Electronic Records</td>
<td>TANF Cluster</td>
<td>-</td>
<td>DSS</td>
<td>Corrective action is ongoing</td>
<td>Change Request (CR435) developed for the records retention requirements. Design will begin by the 2nd Quarter 2019. An incremental methodology by Program AREA will be utilized for the development and implementation. The first program area will be completed by December 2019. (As of 2019, VACMS has not reached the 10 year requirement for the MA program).</td>
<td>Repeat in 2019 APA report. The Virginia Department of Social Services, Division of Enterprise Systems has Change Request CR435: Records Purge and Retention tentatively on the schedule for November 2020 release and deployment. The business cites tentative due to IT leadership changes and the fact that agency priorities may cause adjustment to any and all scheduled changes.</td>
</tr>
<tr>
<td>2018</td>
<td>75</td>
<td>2018-058</td>
<td>Continue Improving Database Security</td>
<td>TANF Cluster</td>
<td>-</td>
<td>DSS</td>
<td>Corrective action is ongoing</td>
<td>DSS Information Security and Risk Management will develop a plan to implement audit, logging, and monitoring security controls over databases in accordance with SEC501 requirements.</td>
<td>Repeat in 2019 APA report. The Virginia Department of Social Services, Department of Information Systems and Department of Information Security and Risk Management are dedicating resources to implementing audit logging and monitoring over the databases.</td>
</tr>
<tr>
<td>2016</td>
<td>32</td>
<td>2016-017</td>
<td>Improve Database Security</td>
<td>Medicaid Cluster</td>
<td>-</td>
<td>DSS</td>
<td>See Finding Number 2017-032</td>
<td>See Finding Number 2017-032</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>70</td>
<td>2017-050</td>
<td>Continue Improving Oversight of Third-Party Service Providers</td>
<td>Medicaid Cluster</td>
<td>-</td>
<td>DSS</td>
<td>Resolved - Corrective action is completed</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>63</td>
<td>2016-044</td>
<td>Improve Oversight of Third Party Service Providers</td>
<td>Medicaid Cluster</td>
<td>-</td>
<td>DSS</td>
<td>See Finding Number 2017-050</td>
<td>See Finding Number 2017-050</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>85</td>
<td>2017-064</td>
<td>Improve Policies, Procedures, and Plans for Backup and Restoration</td>
<td>Medicaid Cluster</td>
<td>-</td>
<td>DSS</td>
<td>Resolved - Corrective action is completed</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>76</td>
<td>2016-055</td>
<td>Improve Policies, Procedures, and Plans for Backup and Restoration</td>
<td>Medicaid Cluster</td>
<td>-</td>
<td>DSS</td>
<td>See Finding Number 2017-064</td>
<td>See Finding Number 2017-064</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>98</td>
<td>2018-082</td>
<td>Ensure Statement of Economic Interest Filers Complete Required Training</td>
<td>N/A</td>
<td>-</td>
<td>DSS</td>
<td>Corrective action is ongoing</td>
<td>DSS will revise written procedures to enhance management’s ability to hold employees accountable. Revisions will include the following: updated the SOEI procedures to improve notification to new employees regarding the SOIE filing and training requirement on job</td>
<td>Significant Differences Between Previously Reported Corrective Action</td>
</tr>
</tbody>
</table>

The Virginia Department of Social Services, Division of Enterprise Systems has Change Request CR435: Records Purge and Retention tentatively on the schedule for November 2020 release and deployment. The business cites tentative due to IT leadership changes and the fact that agency priorities may cause adjustment to any and all scheduled changes.

The new corrective action resolved the discrepancies on when the SOEI training must be completed.

DSS employees in Positions of Trust, who had not completed the training, were given the corrected instructions that the initial training should be completed within 2-months of hire. All identified employees have since completed the SOEI training. DSS Board Members were confirmed for the FY2020 cycle and will be added to the site during the enrollment FY2020 period.

functions. Further, Organizational Development will update the separation and transfer checklist to include Cardinal access removal, as well as any other systems not controlled by the central authentication system.
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<tbody>
<tr>
<td>2017</td>
<td>104</td>
<td>2017-082</td>
<td>N/A</td>
<td>-</td>
<td>DSS</td>
<td>See Finding Number 2018-082</td>
<td>Postings. Future postings and offer letters will include statements regarding the annual requirement to complete SOEI filing and complete the training upon hire and every 24-months thereafter, as well as, a notice that failure to complete the filing may result in a $250 fine to the selected candidate or employee. A statement of Economic Interests filing and SOEI training every 24-months will be included in the Employee Work Profile for an employee in a position of trust. OD will notify the Commissioner when an employee in a position of trust fails to complete the financial disclosure and/or training by the required date. The Commissioner will take the appropriate action to ensure the employee completes the SOEI requirements.</td>
<td></td>
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</tr>
<tr>
<td>2018</td>
<td>104</td>
<td>2018-087</td>
<td>TANF Cluster</td>
<td>-</td>
<td>DSS</td>
<td>Corrective action is ongoing</td>
<td>The Division of Benefit Programs currently has an active change request with the Division of Enterprise Systems to automate the IRVS process. The process is identified as mandatory in the policy manual, therefore there is no need to update the guidance. Additional monitoring of agency processes will be put in place until the change request implementing automation is put in place.</td>
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<tr>
<td>2018</td>
<td>105</td>
<td>2018-088</td>
<td>TANF Cluster</td>
<td>-</td>
<td>DSS</td>
<td>Corrective action is ongoing</td>
<td>The Work Verification Plan has been updated and will soon be submitted to ACF for approval.</td>
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<tr>
<td>2018</td>
<td>106</td>
<td>2018-089</td>
<td>TANF Cluster</td>
<td>-</td>
<td>DSS</td>
<td>Corrective action is ongoing</td>
<td>Findings meeting with Business Areas scheduled for January 24, 2019. Determine if VaCMS Change Request or Defect Tickets need to be developed. Based on the findings defects will be schedule in a 2019 VaCMS release. If Change Request (CR) required, documentation for CR will be excluded from the list of SOEI Filers submitted on the Council site.</td>
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</table>

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<tbody>
<tr>
<td>2018</td>
<td>107</td>
<td>2018-090</td>
<td>Obtain Federal Authorization before Deviating from Cash Management Requirements</td>
<td>TANF Cluster</td>
<td>-</td>
<td>DSS</td>
<td>Resolved - Corrective action is completed</td>
<td>This finding was recently issued a &quot;repeat finding&quot; by the APA.</td>
<td>Reason for Recurrence: None</td>
</tr>
<tr>
<td>2018</td>
<td>108</td>
<td>2018-091</td>
<td>Improve Controls over Federal Reporting</td>
<td>SNAP Cluster</td>
<td>-</td>
<td>DSS</td>
<td>Corrective action is ongoing</td>
<td>Change Request (CR434) developed July 2018 to make changes to the FNS - 209 report. The changes will be included in the March 2019 release.</td>
<td>Reason for Recurrence: None</td>
</tr>
<tr>
<td>2018</td>
<td>109</td>
<td>2018-092</td>
<td>Improve Process and Controls over Subrecipient Monitoring</td>
<td>10.561, 93.558, 93.568, 93.778</td>
<td>-</td>
<td>DSS</td>
<td>Corrective action is ongoing</td>
<td>Organizational Development staff working with Deputy Commissioner to review, revise, and update Department’s new approach to subrecipient monitoring.</td>
<td>Reason for Recurrence: None</td>
</tr>
<tr>
<td>2018</td>
<td>110</td>
<td>2018-093</td>
<td>Ensure that Subrecipient Reviews Adhere to Monitoring Plan</td>
<td>10.561, 93.558, 93.568, 93.778</td>
<td>-</td>
<td>DSS</td>
<td>Corrective action is ongoing</td>
<td>Will be included in new Subrecipient monitoring plan.</td>
<td>Reason for Recurrence: None</td>
</tr>
<tr>
<td>2018</td>
<td>64</td>
<td>2018-045</td>
<td>Perform Annual Access Review of Information System</td>
<td>N/A</td>
<td>-</td>
<td>DOC/CA</td>
<td>Resolved - Corrective action is completed</td>
<td>The Office of Human Resources within the Department of Corrections (DOC) has a systematic process for reconciling essential retirement data between the Human Resources Information System and the Virginia Retirement Benefits System. DOC’s Human Resource procedure was revised to include the appropriate process for maintaining documentation of the reconciliations between the two systems. Subsequently, the enhanced procedures for reconciliation between the human resources system and the retirement benefits system were distributed to Human Resource (HR) Officers and HR support staff at the annual document release.</td>
<td>Reason for Recurrence: None</td>
</tr>
<tr>
<td>2018</td>
<td>101</td>
<td>2018-084</td>
<td>Document Retirement Benefits System Reconciliations</td>
<td>N/A</td>
<td>-</td>
<td>DOC/CA</td>
<td>Corrective action is ongoing</td>
<td>This finding was recently issued a &quot;repeat finding&quot; by the APA. The Department of Corrections did not expect to see the finding being tested so soon and sent a request to the APA on November 13, 2019 explaining its concern of not having sufficient time to resolve this finding. The Department requested the APA to delay the following year to test the material due in part to the vast size and complexity of the DOC and the fact that as in previous years, many corrective action plans need time to be refined, checked to ensure processes are working as expected, obtained complete buy-in from staff needed to perform certain actions, and have the needed resources available.</td>
<td>Reason for Recurrence: None</td>
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**Department of Corrections**

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<tr>
<td>2018</td>
<td>64</td>
<td>2018-045</td>
<td>Perform Annual Access Review of Information System</td>
<td>N/A</td>
<td>-</td>
<td>DOC/CA</td>
<td>Resolved - Corrective action is completed</td>
<td>The Office of Human Resources within the Department of Corrections (DOC) has a systematic process for reconciling essential retirement data between the Human Resources Information System and the Virginia Retirement Benefits System. DOC’s Human Resource procedure was revised to include the appropriate process for maintaining documentation of the reconciliations between the two systems. Subsequently, the enhanced procedures for reconciliation between the human resources system and the retirement benefits system were distributed to Human Resource (HR) Officers and HR support staff at the annual document release.</td>
<td>Reason for Recurrence: None</td>
</tr>
<tr>
<td>2018</td>
<td>101</td>
<td>2018-084</td>
<td>Document Retirement Benefits System Reconciliations</td>
<td>N/A</td>
<td>-</td>
<td>DOC/CA</td>
<td>Corrective action is ongoing</td>
<td>This finding was recently issued a &quot;repeat finding&quot; by the APA. The Department of Corrections did not expect to see the finding being tested so soon and sent a request to the APA on November 13, 2019 explaining its concern of not having sufficient time to resolve this finding. The Department requested the APA to delay the following year to test the material due in part to the vast size and complexity of the DOC and the fact that as in previous years, many corrective action plans need time to be refined, checked to ensure processes are working as expected, obtained complete buy-in from staff needed to perform certain actions, and have the needed resources available.</td>
<td>Reason for Recurrence: None</td>
</tr>
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<tr>
<td>2017</td>
<td>97</td>
<td>2017-076</td>
<td>Comply with 1,500 Hour Rule for Wage Employees</td>
<td>N/A</td>
<td>-</td>
<td>DOC/CA</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>105</td>
<td>2017-083</td>
<td>Improve Controls Over Building and Grounds Inventory at Fluvanna Correction Center for Women</td>
<td>N/A</td>
<td>-</td>
<td>DOC/CA</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
<td></td>
<td></td>
</tr>
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</table>

**Virginia Alcoholic Beverage Control Authority**

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<tbody>
<tr>
<td>2018</td>
<td>64</td>
<td>2018-046</td>
<td>Improve Logical Access Controls for Users with Privileged Access</td>
<td>N/A</td>
<td>-</td>
<td>ABC</td>
<td>Corrective action is ongoing</td>
<td></td>
<td>This corrective action remains on-going. ABC is in the process of implementing a new Identity Management System, which will ultimately be used to manage user access on a global scale. It is currently being rolled out for use with the new Financial Reporting System. Additionally, ABC has made significant progress updating information security policies and procedures since the transition to an authority.</td>
<td>Corrective Action is ongoing.</td>
</tr>
</tbody>
</table>

The updated procedure was also communicated to the Department's HR community during monthly staff meetings, outlined in a monthly HR newsletter, and distributed to HR staff by mass email. As the HR Office at Headquarters has reinforced the importance of thorough and timely reconciliations with Department HR staff, these actions will assist the Payroll Department in resolving credible compensation reconciliation in a timely manner. An internal HR procedure has been drafted that addresses how to perform and document reconciliations. This procedure will be finalized, approved by management, and shared with DOC staff by June 30, 2019. The Human Resources Director will generate a memo to the HROs with a copy to unit heads. The purpose of this memo will be to further emphasize the importance of clearing discrepancies prior to certifying the Virginia Retirement System snapshot.

HR support staff during both conferences in 2018; (3) The HR Community (as a follow-up after the conferences) via email; (4) HROs monthly by our Benefits Analyst; and (5) The HR Community via our January 2019 newsletter. Additionally, the Department uses this written procedure for initial training for new HR team members and as a continuous training tool for existing HR employees. The HR Benefits Analyst has the duty of reviewing and updating the procedure each year to ensure it is relevant, current and accurate.
### Corrective Action and Applicable Deliverables for Previous Findings Not Corrected or Partially Corrected

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<th>Significant Differences Between Previously Reported Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>63</td>
<td>Improve Database Security</td>
<td>N/A</td>
<td>-</td>
<td>ABC</td>
<td>Resolved - Corrective action is completed</td>
<td>and procedures to be implemented by the end of FY19. ABC will update our progress, on a quarterly basis, with the Virginia Department of Accounts (DOA).</td>
<td>continuous monitoring/logging policy. Additionally, ABC is targeting completion of an overall access management and asset management policy by the end of September, 2019.</td>
</tr>
<tr>
<td>2018</td>
<td>62</td>
<td>Ensure Timely Notification of Terminations and Transfers</td>
<td>N/A</td>
<td>-</td>
<td>DMV</td>
<td>Corrective action is ongoing</td>
<td>DMV understands the need for a comprehensive set of controls for ensuring proper de-provisioning of accounts when transferring or terminating users and is taking the necessary steps to bring our current technical controls into alignment with Commonwealth security standards. We are presently involved in a project with VITA’s Multi-Source Integrator to implement two Identity Access Management platforms that, when fully configured, will meet all our access control needs. Our expected go-live for the new platforms is early to mid-2019.</td>
<td>Corrective Action is ongoing. Working with SAIC(VITA MSI Vendor) on the implementation of Sailpoint for Identity and Access Management. Contracted for a Business Process Review of the Access Management Process.</td>
</tr>
<tr>
<td>2018</td>
<td>81</td>
<td>Improve Information Technology Change Management Program</td>
<td>N/A</td>
<td>-</td>
<td>DMV</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
<td>No significant differences.</td>
</tr>
<tr>
<td>2017</td>
<td>74</td>
<td>Improve Information Technology Change Management Program</td>
<td>N/A</td>
<td>-</td>
<td>DMV</td>
<td>See Finding Number 2018-065</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>23</td>
<td>Improve Controls over Financial Reporting</td>
<td>N/A</td>
<td>-</td>
<td>DMV</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>16</td>
<td>Improve Controls over Financial Reporting</td>
<td>N/A</td>
<td>-</td>
<td>DMV</td>
<td>See Finding Number 2017-006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>89</td>
<td>Continue Improving Application Security Controls</td>
<td>N/A</td>
<td>-</td>
<td>DMV</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>79</td>
<td>Improve Application Security Controls</td>
<td>N/A</td>
<td>-</td>
<td>DMV</td>
<td>See Finding Number 2017-068</td>
<td></td>
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<tr>
<td>2015</td>
<td>17</td>
<td>Improve System Authentication Controls</td>
<td>N/A</td>
<td>-</td>
<td>DMV</td>
<td>See Finding Number 2016-058</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Department of Motor Vehicles**

**Department of Transportation**

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**FISCAL YEAR 2019**

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<tbody>
<tr>
<td>2018</td>
<td>16</td>
<td>2018-002</td>
<td>Evaluate Invoices for Goods or Services Provided Across Multiple Fiscal Years</td>
<td>N/A</td>
<td>-</td>
<td>VDOT</td>
<td>Resolved - Corrective action is completed</td>
<td>Corrective Action Taken to Date</td>
<td>Significant Differences Between Previously Reported Corrective Action</td>
</tr>
<tr>
<td>2018</td>
<td>17</td>
<td>2018-003</td>
<td>Improve Policies over Service Concession Arrangements</td>
<td>N/A</td>
<td>-</td>
<td>VDOT</td>
<td>Resolved - Corrective action is completed</td>
<td>Corrective Action Taken to Date</td>
<td>Significant Differences Between Previously Reported Corrective Action</td>
</tr>
<tr>
<td>2017</td>
<td>19</td>
<td>2017-004</td>
<td>Improve Internal Controls over Financial Reporting of Service Concession Arrangements</td>
<td>N/A</td>
<td>-</td>
<td>VDOT</td>
<td>See Finding Number 2018-003</td>
<td>Corrective Action Taken to Date</td>
<td>Significant Differences Between Previously Reported Corrective Action</td>
</tr>
<tr>
<td>2018</td>
<td>33</td>
<td>2018-016</td>
<td>Enhance Review of Accounts Receivable for Financial Reporting</td>
<td>N/A</td>
<td>-</td>
<td>VDOT</td>
<td>Corrective action is ongoing</td>
<td>Fiscal Division will initiate processes to identify and report new and existing debt issued on behalf of others in which agreements to repay debt service are involved. Fiscal Division will continue to employ detailed review procedures on the Accounts Receivable submission and will add emphasis on the review of the long term debt column. Correct Action is ongoing. VDOT met internally to discuss corrective action on all AR related items.</td>
<td>Significant Differences Between Previously Reported Corrective Action</td>
</tr>
<tr>
<td>2018</td>
<td>37</td>
<td>2018-020</td>
<td>Improve Financial Reporting of Infrastructure Assets with Proactive Policies and Procedures</td>
<td>N/A</td>
<td>-</td>
<td>VDOT</td>
<td>Corrective action is ongoing</td>
<td>Fiscal Division will strengthen current infrastructure capitalization procedures to incorporate the areas identified by the APA, including development of detailed desk procedures, and update them annually. Fiscal Division will review current processes for identification of reportable infrastructure and labelling and employ additional controls to ensure consistency and accuracy. Corrective Action is ongoing. Procedures in Progress.</td>
<td>Significant Differences Between Previously Reported Corrective Action</td>
</tr>
<tr>
<td>2018</td>
<td>93</td>
<td>2018-076</td>
<td>Continue to Strengthen Internal Controls over the Employee Separation Process</td>
<td>N/A</td>
<td>-</td>
<td>VDOT</td>
<td>Resolved - Corrective action is completed</td>
<td>Corrective Action Taken to Date</td>
<td>Significant Differences Between Previously Reported Corrective Action</td>
</tr>
<tr>
<td>2017</td>
<td>91</td>
<td>2017-071</td>
<td>Complete Separating Employee Checklists Timely</td>
<td>N/A</td>
<td>-</td>
<td>VDOT</td>
<td>See Finding Number 2018-076</td>
<td>Corrective Action Taken to Date</td>
<td>Significant Differences Between Previously Reported Corrective Action</td>
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<td>State Corporation Commission</td>
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</tr>
<tr>
<td>2014</td>
<td>56</td>
<td>2014-033</td>
<td>Improve Information Security Program</td>
<td>N/A</td>
<td>-</td>
<td>SCC</td>
<td>Corrective action is ongoing</td>
<td>The Commission will dedicate resources to improve the information security program, and will develop a plan to draft and implement the specific policies and procedures noted in the APA findings in accordance with the SECS01 standard. That plan will also address development of a gap analysis between the current information security program and the SECS01 standard. Corrective Action is ongoing. A repeatable process has been implemented to improve the ability to draft and approval process for standards. This has allowed for two policies to be completed within a compressed timeframe. Continued progress is being made to complete policies with the intent to meet the end of year goal. The resource leading this effort is out on extended FMLA leave so the 'Revised Estimated Completion Date' may need to be updated in the future.</td>
<td>Significant Differences Between Previously Reported Corrective Action</td>
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FISCAL YEAR 2019

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### Federal Award Findings

#### Virginia Lottery

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<tbody>
<tr>
<td>2018</td>
<td>43</td>
<td>2018-024</td>
<td>Improve Application and Database Controls over the Enterprise Resource Planning System</td>
<td>N/A</td>
<td>-</td>
<td>VAL</td>
<td>Resolved - Corrective action is completed</td>
<td>Reason for Recurrence: See Finding Number 2018-024</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>56</td>
<td>2017-036</td>
<td>Improve Application and Database Controls over the Enterprise Resource Planning System</td>
<td>N/A</td>
<td>-</td>
<td>VAL</td>
<td>See Finding Number 2018-024</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>25</td>
<td>2016-010</td>
<td>Improve Application and Database Controls over the Dynamics AX Financial System</td>
<td>N/A</td>
<td>-</td>
<td>VAL</td>
<td>See Finding Number 2017-036</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>82</td>
<td>2018-066</td>
<td>Improve Server Operating System Security</td>
<td>N/A</td>
<td>-</td>
<td>VAL</td>
<td>Corrective action is ongoing</td>
<td>Implementation of improved server security will be completed by June 30, 2019.</td>
<td></td>
</tr>
</tbody>
</table>

#### U.S. Department of Agriculture

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<tbody>
<tr>
<td>2018</td>
<td>118</td>
<td>2018-026</td>
<td>Improve Web Application Security[1]</td>
<td>10.557</td>
<td>-</td>
<td>VDH</td>
<td>Corrective action is ongoing</td>
<td>The VDH technical team will work with VITA and OIF to implement or enhance security controls to mitigate the risks noted by APA.</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>118</td>
<td>2018-051</td>
<td>Perform Review of Service Organization Control Reports for Third-Party Service Providers[2]</td>
<td>10.557</td>
<td>-</td>
<td>VDH</td>
<td>Resolved - Corrective action is completed</td>
<td>Reporting requirements currently being investigated. Audit Review Procedures to be developed and implemented based on this analysis. Estimated to be complete by July 31, 2019. Request has been made to VITA / Partnership to upgrade all web and applications servers to Windows 2016. Certification of hardware environment is expected by June 30, 2019. OIM staff will perform database and application installations by September 30, 2019. Vulnerability scans are conducted quarterly. Review and Remediation process is conducted based on results. Software vendor is engaged in providing specific remediation for specific items.</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>118</td>
<td>2018-091</td>
<td>Improve Controls over Federal Reporting[3]</td>
<td>SNAP Cluster</td>
<td>-</td>
<td>DSS</td>
<td>Corrective action is ongoing</td>
<td>Change Request (CR434) developed July 2018 to make changes to the FNS - 209 report. The changes will be included in the March 2019 release.</td>
<td></td>
</tr>
</tbody>
</table>

[1] Improving Web Application Security

[2] Improving Service Organization Control Reports for Third-Party Service Providers

[3] Improving Controls over Federal Reporting

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<tbody>
<tr>
<td>2018</td>
<td>118</td>
<td>2018-094</td>
<td>Comply with Federal Requirement over High-Risk Vendors⁽¹⁾</td>
<td>10.557</td>
<td>-</td>
<td>VDH</td>
<td>Corrective action is ongoing</td>
<td>The Division of Community Nutrition (DCN) will draft updated language for the Virginia Administrative Code to address the guidance provided on high risk vendors.</td>
<td>Still in progress.</td>
<td>Language has been drafted and submitted.</td>
<td>No differences.</td>
</tr>
<tr>
<td>2018</td>
<td>118</td>
<td>2018-095</td>
<td>Improve Controls over WIC Information System Access⁽¹⁾</td>
<td>10.557</td>
<td>-</td>
<td>VDH</td>
<td>Corrective action is ongoing</td>
<td>The IT Support Team within DCN will distribute the WIC Crossroads Access Report on a monthly basis (10th day of every month) with a five (5) day response period for the LHDs to review the report and denote the status of LHD staff with the Crossroads System. The responses will be recorded on an Excel spreadsheet by the 16th day of every month.</td>
<td>Still in progress.</td>
<td>The WIC Crossroads Access Report process has been implemented. As an additional measure of control, requests for new or changes to Crossroads user access must be reviewed and approved by the Nutrition Education Liaison. NOTE: This finding was deemed by APA as on-going as of June 30, 2019 as a result of it being a repeat finding for the FY2019 APA Audit VDH EPPI concurs that supervisors did not submit certifications in a timely manner. However, regarding the access to EPPIC, it is an external system VDH does not own the system and is in the process of determining if the contract will be renewed.</td>
<td>No differences.</td>
</tr>
<tr>
<td>2018</td>
<td>118</td>
<td>2018-096</td>
<td>Retain Documentation of WIC Financial Eligibility⁽¹⁾</td>
<td>10.557</td>
<td>-</td>
<td>VDH</td>
<td>Resolved - Corrective action is completed</td>
<td>OFHS will work with the local health departments to ensure the prescribed separation of duties logs are utilized when circumstances preclude multiple parties from being involved in eligibility determination and the issuance of benefits.</td>
<td>Still in progress.</td>
<td>Policy has been drafted for review by USDA to address this finding. Once approval is obtained a process will be developed to roll out the changes to the field.</td>
<td>No differences.</td>
</tr>
<tr>
<td>2018</td>
<td>118</td>
<td>2018-097</td>
<td>Ensure Adequate Separation of Duties when Certifying WIC Participants⁽¹⁾</td>
<td>10.557</td>
<td>-</td>
<td>VDH</td>
<td>Corrective action is ongoing</td>
<td>OFHS will work with the local health departments to ensure the prescribed separation of duties logs are utilized when circumstances preclude multiple parties from being involved in eligibility determination and the issuance of benefits.</td>
<td>Still in progress.</td>
<td>Policy has been drafted for review by USDA to address this finding. Once approval is obtained a process will be developed to roll out the changes to the field.</td>
<td>No differences.</td>
</tr>
<tr>
<td>2018</td>
<td>118</td>
<td>2018-098</td>
<td>Comply with Virginia Administrative Code Requirements for Above-50 Percent Vendors⁽¹⁾</td>
<td>10.557</td>
<td>-</td>
<td>VDH</td>
<td>Corrective action is ongoing</td>
<td>VDH will draft updates to the Virginia Administrative Code to follow the federal regulations to review new applicants within the first 6 months of authorization to validate that they are not a 50 percent vendor.</td>
<td>Still in progress.</td>
<td>Language has been drafted and submitted.</td>
<td>No differences.</td>
</tr>
<tr>
<td>2018</td>
<td>118</td>
<td>2018-099</td>
<td>Develop Procedures to Ensure Price Limits Are Accurately Recorded⁽¹⁾</td>
<td>10.557</td>
<td>-</td>
<td>VDH</td>
<td>Corrective action is ongoing</td>
<td>The Division of Community Nutrition (DCN) will need to collaborate with our Crossroads MIS contractor, DXC, investigate this programming issue, determine the issue that was observed, and build controls. The problem has been reported the problem to our MIS contractor. We (DCN) have</td>
<td>Still in progress.</td>
<td>DXC has been made aware of the issue and are researching.</td>
<td>No differences.</td>
</tr>
<tr>
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<tr>
<td>2018</td>
<td>119</td>
<td>2018-100</td>
<td>Ensure Timely Subrecipient Monitoring(1)</td>
<td>10.557</td>
<td>-</td>
<td>VDH</td>
<td>Resolved - Corrective action is completed</td>
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<tr>
<td>U. S. Department of Commerce</td>
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<tr>
<td>2017</td>
<td>113</td>
<td>2017-089</td>
<td>Improve Controls over Federal Reporting</td>
<td>Economic Development Cluster</td>
<td>-</td>
<td>VSBFA</td>
<td>Corrective action is ongoing</td>
<td>Financing Authority should implement policies and procedures, to include a documented review process, over the reporting process to ensure accurate reporting of RLF information to EDA and retain all support for material amounts reported.</td>
<td>After consultation with APA, APA has determined that it prefers to leave the audit finding open in order to allow VSBFA to file additional semi-annual reports and thereby accumulate additional report history which can be audited by APA at a later date.</td>
<td>Detailed desk procedures for the preparation of the semi-annual ED209 report, which was the subject of this audit finding, were drafted in April 2019 and finalized in July 2019. These procedures are currently in use.</td>
<td>No significant differences.</td>
</tr>
<tr>
<td>U. S. Department of Defense</td>
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<tr>
<td>2017</td>
<td>114</td>
<td>2017-090</td>
<td>Strengthen Internal Controls over Federal Awards</td>
<td>12.401</td>
<td>-</td>
<td>DMA</td>
<td>Corrective action is ongoing</td>
<td>Properly classify all expenses to the correct CFDA number. Update policies and procedures to address how DMA allocates costs by program, project, or facility. Maintain a comprehensive master listing of all term contracts. Conduct a data call for all subordinate procurement departments to identify current term contracts, ending dates, renewal dates etc… Develop and enforce an SOP that captures all term contracts and post them to a common location.</td>
<td>It took a lot longer to get guidance on using eVA as the central repository for contracts than we had planned.</td>
<td>The data has been collected and policies written and being staffed internally.</td>
<td>We had to adjust our policies and procedures based on continuing guidance from DGS.</td>
</tr>
<tr>
<td>2017</td>
<td>116</td>
<td>2017-091</td>
<td>Comply with Statewide and Agency Procurement Policies and Procedures</td>
<td>12.401</td>
<td>-</td>
<td>DMA</td>
<td>Corrective action is ongoing</td>
<td>Obtain date stamps for all offices that receive bids/proposals and other procurement documents instead of hand writing date/time of receipt. Establish a system to ensure copies of bids are posted in a public area.</td>
<td>Corrective Action is ongoing.</td>
<td>Guidance was issued and has been written into draft policy.</td>
<td>We had to adjust our policies and procedures based on continuing guidance from DGS.</td>
</tr>
<tr>
<td>U. S. Department of Education</td>
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<td>2018</td>
<td>120</td>
<td>2018-101</td>
<td>Improve Compliance over Enrollment Reporting</td>
<td>Student Financial Assistance Programs Cluster</td>
<td>-</td>
<td>CVCC</td>
<td>Resolved - Corrective action is completed</td>
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<td></td>
<td>Corrective action is ongoing</td>
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<td></td>
<td>No significant differences.</td>
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<tr>
<td>GMU</td>
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<td>Submit the first summer enrollment file within the first 30 days of the term, send the summer subsequent date within the first 45 days of the first file, and submit the last transmission no more than five days before the end of the term. Policies and procedures updated to reflect this change on January 31, 2019. Allocate more resources through cross training of staff to monitor the application of the &quot;graduated&quot; status to the National Student Loan Clearinghouse records following the submission of degree files. Select a sample of students who have had program changes. Review and update procedures used to update student records when processing change of program requests. Schedule regular monthly meetings between the Office of the Registrar and the Office of Student Financial Aid to review areas of weakness and ensure consistent reporting. Review and seek external guidance on dates to use for program level changes and other enrollment reporting challenges.</td>
<td>The finding was issued in early calendar 2019. The changes needed to correct the finding had to be implemented over the summer semester. As a result, this corrective action had not been completed as of June 30, 2019.</td>
<td>As of June 30, 2019, the first summer files had been submitted to NSLDS. As of June 30, 2019, the policy and initial &quot;Grad Only&quot; files had been sent.</td>
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<td>JMU</td>
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<td>Resolved - Corrective action is completed</td>
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<tr>
<td>NSU</td>
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<td></td>
<td>Corrective action is ongoing</td>
<td>NSU Financial Aid Office personnel will work with the Registrar to ensure timely and accurate reporting of enrollment verification records as well as error batches from the National Clearinghouse. The following internal control procedures will be implemented to ensure compliance. An enrollment status code of 'withdrawal' will be implemented to capture students who unofficially withdraw during the 10-week period and students who final grading periods resulted in all &quot;F&quot; grades. Reports will be generated to capture students who fail to return from each semester. All batches uploaded to the National Clearinghouse will be reviewed</td>
<td>Implementation of the plan was complete. Actions are ongoing through September 30th for sampling and monitoring to ensure compliance.</td>
<td>The Financial Aid Office has conducted a random sampling of students who withdrew from the University (officially and unofficially), graduated and who did not return from fall 2018 to spring 2019 to ensure that student enrollment verification status and dates matches in both the National Clearinghouse and on the National Student Loan Database System (NSLDS). In addition, both the Financial Aid and Registrar’s Offices received submissions and errors emails from the Clearinghouse. NSU complies with the reporting timeline administered by the Clearinghouse. The ARMICS coordinator in the University’s Controllers Office also receives notifications when a file is uploaded to the NSLDS. Financial aid concluding sampling of students who withdraw from the University. Designated staff members will continue the efforts of monitoring student enrollment verification data between NSU and the Clearinghouse and NSLDS.</td>
<td>Coordination between Financial Aid personnel and Registrar Office to included having designated staff monitor the enrollment verification data between the NSU submission, the Clearinghouse and NSLDS. In addition, the Registrar has created a unofficial withdrawal status code in Colleague to capture students who unofficially withdraws from the University. The Financial Aid Office conducted a 1-year random sample of students who withdrew (officially and unofficially) and who failed to return to the University fall 2018 to spring 2019 and verified that data submitted to the National Clearinghouse was linked to NSLDS. Our self-compliance evaluation process is available for review.</td>
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<td>to ensure that they are accepted and free of errors. The Registrar Office will notify Financial Aid personnel of all batches sent to the National Clearinghouse during the 30-day process, 10-week and final grading periods, and between semesters breaks for verifying records in NSLDS.</td>
<td>submissions and the Clearinghouse and NSLDS.</td>
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<tr>
<td>NVCC</td>
<td>Corrective action is ongoing</td>
<td>NVCC has been working with the VCCS to ensure that the data extract used for enrollment reporting is correct. The Registrar's department will continue to educate faculty and staff on correctly entering enrollment data and class dates to ensure accurate enrollment reporting. Obtain clarification from Department of Education on program effective date and NSLDS reporting processes to ensure compliance.</td>
<td>Corrective Action is ongoing. Continues to use a quality control workgroup and review process.</td>
<td>None.</td>
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<td>ODU</td>
<td>Corrective action is ongoing</td>
<td>ODU is working with our ERP vendor to determine the cause of the reporting discrepancies and to update their reporting logic within Banner.</td>
<td>Delay in Ellucian completing all necessary corrections to the NSLDS reporting software. Elucian has provided one update that corrected 95% of the reporting issues and that has been tested and moved into our live environment and is being used for reporting.</td>
<td>None.</td>
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<td>PDCCC</td>
<td>Corrective action is ongoing</td>
<td>PDCCC management has implemented a quality control review process and workgroup. The Registrar, Financial Aid Coordinator, Dean of Student Affairs, and Return of Aid Processor workgroup will perform the following functions as noted on the calendar: review the NSLDS Roster, disseminate the NSLDS Reporting Manual to the OCR members, increase subsequent reporting to NSC, collaborate on the R2T4 report monthly, and review the graduation file. All corrective actions have been implemented with the exception of the March NSC training session in March 2019.</td>
<td>Corrective Action is ongoing. Continues to use a quality control workgroup and review process.</td>
<td>None.</td>
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<td>RU</td>
<td>Corrective action is ongoing</td>
<td>The Registrar’s Office immediately begun using the Internal validation is still conducted. This item will not be marked complete</td>
<td>Corrective Action is ongoing.</td>
<td>No significant differences.</td>
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<td></td>
<td>Corrective Action is ongoing</td>
<td>Continues to use a quality control workgroup and review process.</td>
<td>None.</td>
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<td>SSCR report, as well as completing any necessary error resolution in a timely manner.</td>
<td>Corrective Action is ongoing</td>
<td>None.</td>
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<td>Student Financial Assistance Program Cluster</td>
<td>None.</td>
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<td></td>
<td></td>
<td>UVA/AD</td>
<td>Resolved - Corrective action is completed</td>
<td>None.</td>
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Conferral date for all students who are not enrolled in the term in which they graduate as standard practice. However, internal validation has not been conducted due to the timing of the availability of NSLDS data. This item will not be marked complete until validation has occurred. In addition, the Registrar’s Office is working with Financial Aid to determine the best policy and procedure to ensure effective dates are not overridden in NSLDS due to submission batch data. Inaccurate enrollment reporting was mostly found with data for students in the fall 2017 semester. In May 2018, The VCCS successfully implemented an updated file extract addressing students who have unofficially withdrawn as well as improvements with graduation reporting. The College submits a an enrollment file to the NSC approximately every 21 days throughout a given semester, and extending beyond the semester not more than 25 days. The College also altered the timeline and order for graduation reporting, which went into effect in August 2018. Both of these changes have resolved the issues stated in the finding. The College will continue to diligently review the Enrollment Error reports and SSCR reports, as well as completing any necessary error resolution in a timely manner. The College will also ensure graduation information is reported timely and completely; with attention to any student reported by the NSC as not having had a graduation row applied to the record.
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<tr>
<td>VCU/AD</td>
<td>Corrective action is ongoing To ensure that unofficial withdrawal enrollment updates are reported accurately and timely to NSLDS, the Office of Financial Aid will perform manual enrollment updates to NSLDS for all students who have withdrawn without official notification during a term/semester. This step has been added to the existing Return of Title IV procedure and will begin implementation at the conclusion of the fall 2018 term/semester. To rectify the graduation status finding, the Office of Records and Registration is sending amended enrollment files to the National Student Clearinghouse (NSC) to update the NSLDS. The office has also added a supplementary enrollment report for graduates only to the transmission schedule provided to the NSC each semester. In addition, quality control reviews will be conducted in collaboration with staff from the Offices of Financial Aid and Records and Registration at the end of each semester to ensure timely and accurate reporting at both the campus and program levels. Processes was changed, but an error was discovered in the Banner process for a limited population of students. Manual process is in place to correct the date errors on the limited population of students that are not handled properly in the Banner process. Error identified has been corrected.</td>
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<tr>
<td>VPSU/ID</td>
<td>Corrective action is ongoing VPSU/ID has met with the National Student Clearinghouse and will begin providing a separate file to the Clearinghouse to ensure records are reported. The production of this file, testing with the National Student Clearinghouse, and creation of an auditing process will be completed. The programs and processes were implemented in production, but it was not possible to retroactively correct FY 2019 data. Therefore, the APA could not test to determine if the correction was effectively implemented and said this comment would have to be continued into FY 2020. The corrections made to the processes and procedures will be used to create the submission for Fall Semester of FY 2020 which will occur in February of 2020. The corrections to the programs and processes could not be used to restate or correct data previously submitted for FY 2019 semesters. So the first submission where the new processes will be actually used will be for the submission for Fall Semester of FY 2020 in February 2020.</td>
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<tr>
<td>VSU</td>
<td>Corrective action is ongoing Generate report to capture students who fail to return from a given semester or term to ensure that the enrollment status for these students are reported accurately. Review all batches uploaded to the NSLDS to ensure that batches are accepted without errors. University was in progress of implementing the CAW. Reports have been generated to capture students who fail to return from a given semester or term to ensure their enrollment status is reported accurately and timely. In addition, all batches uploaded to NSLDS are being reviewed to ensure the are accepted without errors. Also, internal quality control reviews are being documented to ensure timely and Initial corrective action implemented and appears to be working effectively.</td>
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and/or correct errors that are reported. Each Semester, quality control reviews will be conducted in collaboration with staff from the Financial Aid Office to ensure timely and accurate reporting.

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<tr>
<td>2015</td>
<td>103</td>
<td>Improve Compliance Over Enrollment Reporting</td>
<td>-</td>
<td>CVCC</td>
<td>NSU</td>
<td>See Finding Number 2018-101</td>
<td>Improving Compliance</td>
<td>-</td>
<td>Improved compliance</td>
<td>-</td>
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<tr>
<td>2012</td>
<td>57</td>
<td>Improve Reporting to National Student Loan Data System</td>
<td>-</td>
<td>CVCC</td>
<td>NSU</td>
<td>See Finding Number 2014-089</td>
<td>Improving Reporting</td>
<td>-</td>
<td>Improved reporting</td>
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<tr>
<td>2018</td>
<td>123</td>
<td>Properly Process Return of Title IV Calculations</td>
<td>-</td>
<td>GMU</td>
<td>NSU</td>
<td>Corrective action is ongoing</td>
<td>Improving Calculations</td>
<td>-</td>
<td>Corrective action as needed</td>
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<td>ODU</td>
<td>NSU</td>
<td>Corrective action is ongoing</td>
<td>Improving Action</td>
<td>-</td>
<td>Corrective action as needed</td>
<td>-</td>
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<tr>
<td>2018</td>
<td>124</td>
<td>2018-103</td>
<td>Improve Notification of Awards to Students</td>
<td>Student Financial Assistance Programs Cluster</td>
<td>-</td>
<td>JMU</td>
<td>Resolved - Corrective action is completed</td>
<td>Effective immediately, the Financial Aid Office has established communication management (CM) codes for all documents that are sent to students via hard copy and email to assist in the process and to store batches in a history file. The revised processes will update the student’s communication log and store the date the notification was sent to the student. Implementation of the plan was complete. Actions are ongoing through September 30th for monitoring to ensure compliance. Financial Aid’s implementation of the “Process Handler” component of the Colleague Student Information System has provided for a systematic approach of sending email communications to students. The 14-day loan cancellation emails are sent to all Direct Student Loans borrowers (federal subsidized, unsubsidized, graduate PLUS and PLUS) after each loan disbursement. The Financial Aid has maintained copies of the weekly 14-day loan cancellation notification email listing for a period of one year after the audit finding. The Financial Aid Office will continue to utilize the “Process Handler” feature to ensure that 14-day cancellation notifications are email to all Direct Student Loans borrowers.</td>
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<td>2018</td>
<td>126</td>
<td>2018-104</td>
<td>Improve Reporting to the Common Origination and Disbursement System</td>
<td>Student Financial Assistance Programs Cluster</td>
<td>-</td>
<td>JMU</td>
<td>Resolved - Corrective action is completed</td>
<td>Staff will no longer make adjustments directly on COD without the approval of Director or Associate Director. Improve documentation with software defects that will include a description of the issue requiring the manual update, corresponding date, and the ID of the impacted student. University was in progress of implementing the CAW.</td>
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<td>2018</td>
<td>127</td>
<td>2018-105</td>
<td>Promptly Return Unclaimed Aid to the Department of Education</td>
<td>Student Financial Assistance Programs Cluster</td>
<td>-</td>
<td>JMU</td>
<td>Resolved - Corrective action is completed</td>
<td>Staff are no longer making adjustments directly on COD without the approval of Director or Associate Director. Communications have been made to ensure sufficient documentation is maintained in the event of software defects. Initial corrective action implemented and appears to be working effectively.</td>
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<tr>
<td>2018</td>
<td>128</td>
<td>2018-106</td>
<td>Establish and Implement Policies and Procedures over Federal Reporting</td>
<td>84.419</td>
<td>-</td>
<td>DOE/COO</td>
<td>Resolved - Corrective action is completed</td>
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<tr>
<td>2018</td>
<td>129</td>
<td>2018-107</td>
<td>Confirm that Subrecipients are not Suspended or Debarred</td>
<td>84.419</td>
<td>-</td>
<td>DOE/COO</td>
<td>Resolved - Corrective action is completed</td>
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<tr>
<td>2016</td>
<td>106</td>
<td>2016-082</td>
<td>Continue to Improve IT Governance</td>
<td>84.126</td>
<td>-</td>
<td>DARS</td>
<td>Resolved - Corrective action is completed</td>
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<tr>
<td>2015</td>
<td>105</td>
<td>2015-099</td>
<td>Perform and Document Monthly Reconciliations of Direct Loans</td>
<td>-</td>
<td>CVCC</td>
<td></td>
<td>Resolved - Corrective action is completed</td>
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<td>2018</td>
<td>118</td>
<td>2018-017</td>
<td>Continue Improving the Accounts Receivable Collection Process(1)</td>
<td>-</td>
<td>DMAS</td>
<td></td>
<td>Corrective action is ongoing</td>
<td>The untimely processing of accounts receivable (AR) transactions is directly associated with the use of manual processes to set up AR transactions. The volume of cases in the AR area are greater than what current staffing levels in that area are able to handle manually. The Fiscal Division has taken action to increase staffing levels in the AR Unit, and will soon be implementing a new system that will allow for automation of some components of the AR process, that will decrease the amount of time required for each AR transaction. Workflow Process Improvement: The Program Integrity (PI) Division partnered with the Information Management (IM) Division to leverage Medicaid Enterprise Systems (MES) to meet their needs with case management and analytics. PI is introducing a new system that will serve as an analytical tool to manage cases. When FADS goes live, Fiscal will partner with PI to determine system enhancements that will allow for an interface between the new system and the AR system which will further automate the member receivable process. In the meantime, Fiscal has increased staffing with temporary resources to assist with member receivables. Provider Receivables: Fiscal continues to work on improving collections for provider receivables. Fiscal added two additional resources in provider receivable in the past 12 months. Member Receivables: Fiscal added an additional resource for the</td>
<td>Increased staffing levels in the AR Unit. Developed a new process to compile documents and refer cases to the Office of the Attorney General - Division of Debt Collection to be in compliance with OAG’s new policy.</td>
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(1) Directly associated with the use of manual processes to set up the accounts receivable transactions.
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<tr>
<td>2017</td>
<td>107</td>
<td>2017-084</td>
<td>Improve the Accounts Receivable Collection Process</td>
<td>DMAS</td>
<td>See Finding Number 2018-017</td>
<td>Medicaid Cluster</td>
<td>Corrective action is ongoing</td>
<td>DSS will develop a plan to document the final five data classifications, three risk assessments, and two system security plans. Further, DSS will develop a plan to test the Continuity of Operations Plan annually through a tabletop exercise and connectivity test of IT resources.</td>
<td>Partial repeat in 2019 APA report.</td>
<td>The Department of Social Services, Information Security and Risk Management Division is in the process of reviewing candidates for the unfilled Risk Manager position. The Risk-Manager’s job duties will include updating data classification for sensitive systems, conducting and updating risk assessments, conducting and updating system security plans, and developing corrective action plans for outstanding risks.</td>
<td>Completed IT contingency planning program aspect of IT risk management point.</td>
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<tr>
<td>2016</td>
<td>103</td>
<td>2016-080</td>
<td>Continue Improving Accounts Receivable Collection Process</td>
<td>DMAS</td>
<td>See Finding Number 2017-084</td>
<td>Medicaid Cluster</td>
<td>Corrective action is ongoing</td>
<td>DSS was not always notified of terminations.</td>
<td>HR continues to do the following with regard to Conflict of Interest Training: References completion of an annual Statement of Economic Interests (SOEI) on all job postings for positions of trust States in employment offer letters that employees in positions of trust must complete a SOEI at hire and annually thereafter. States in employment offer letters that COI training must be completed and the employee’s responsibilities. Sends an email to the new hire’s personal email address to inform them about the required COI training and that they will have to complete the training within the first two months of employment. Sent an email on January 7, 2019 as a reminder to everyone that the COI training must be completed every two years. This will be sent annually in January. A reconciliation is performed quarterly between the VA Learning Center report of employees who have taken the COI training, and the PMIS</td>
<td>OCS and HR implemented an Exit clearance workflow process to off-boarding process. OCS also starting performing their own reviews.</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>118</td>
<td>2018-025</td>
<td>Improve IT Risk Management and Contingency Planning Program</td>
<td>DSS</td>
<td>Partial repeat in 2019 APA report.</td>
<td>TANF Cluster</td>
<td>Corrective action is ongoing</td>
<td>OCS was not always notified of terminations.</td>
<td>HR continues to do the following with regard to Conflict of Interest Training: References completion of an annual Statement of Economic Interests (SOEI) on all job postings for positions of trust States in employment offer letters that employees in positions of trust must complete a SOEI at hire and annually thereafter. States in employment offer letters that COI training must be completed and the employee’s responsibilities. Sends an email to the new hire’s personal email address to inform them about the required COI training and that they will have to complete the training within the first two months of employment. Sent an email on January 7, 2019 as a reminder to everyone that the COI training must be completed every two years. This will be sent annually in January. A reconciliation is performed quarterly between the VA Learning Center report of employees who have taken the COI training, and the PMIS</td>
<td>OCS and HR implemented an Exit clearance workflow process to off-boarding process. OCS also starting performing their own reviews.</td>
<td></td>
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<tr>
<td>2018</td>
<td>118</td>
<td>2018-040</td>
<td>Remove Access to the Claims Processing System in a Timely Manner</td>
<td>DMAS</td>
<td>Corrective action is ongoing</td>
<td>Medicaid Cluster</td>
<td>Corrective action is ongoing</td>
<td>OCS Access management team set up a new tracking, review, and suspend process in December 2018 to ensure timely removal of access to claims Processing System. OCS is working with HR, managers, and supervisors to have management directly notify OCS of exiting employees. HR has always notified OCS of employee terminations through the following standing operating procedures/processes: HR sends weekly HR Infoshare - Staff Changes notification to all DMAS employees which includes OCS staff. This includes all employee terminations/separations. For immediate discharges/terminations, the HR Director or HR Benefits and</td>
<td>Full compliance with APA report.</td>
<td>The Department of Social Services, Information Security and Risk Management Division is in the process of reviewing candidates for the unfilled Risk Manager position. The Risk-Manager’s job duties will include updating data classification for sensitive systems, conducting and updating risk assessments, conducting and updating system security plans, and developing corrective action plans for outstanding risks.</td>
<td>Completed IT contingency planning program aspect of IT risk management point.</td>
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<tr>
<td>2017</td>
<td>34</td>
<td>2017-016</td>
<td>Remove Access to the Current Claims Processing System in a Timely Manner</td>
<td>Medicaid Cluster</td>
<td>-</td>
<td>DMAS</td>
<td>See Finding Number 2018-040</td>
<td>Operations Manager emails directly OCS an &quot;Advance Notice&quot; email to alert OCS immediately that access needs to be terminated. HR's off boarding process requires manager and supervisors of exiting employees to initiate the Exit Clearance Form. All relevant divisions have to sign off on the form as applicable including OCS, HR and IM have worked together to complete the Exit Clearance Automation workflow process in K2. This process was launched on January 11, 2019. Instructions and training video were sent to all DMAS workforce members on January 11, 2019. This will automate the exit clearance process which was a manual process before. The exit notice will flow to OCS and HR. At the Management Team meeting on January 14, 2019, all division their managers and supervisors were required to initiate a separating employee’s exit clearance through the SharePoint application.</td>
<td>Database report of SOEI filers to identify any filers who have not completed their CDI training. The HR Division Procedure regarding Conflict of Interest was updated in March 2019. An annual update to the Disclosure System is performed to verify that DMAS employees, associated positions and contact information is accurate.</td>
<td></td>
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<tr>
<td>2018</td>
<td>118</td>
<td>2018-042</td>
<td>Remove Separated Employees’ Access to Critical Systems in a Timely Manner</td>
<td>TANF Cluster</td>
<td>-</td>
<td>DSS</td>
<td>Corrective action is ongoing</td>
<td>DSS will revise the Separation and Transfer Checklist to add blank rows under the system name list for division specific access removal and non-SAMS systems. DSS will reinforce through security awareness training the Personnel Transaction Form and Separation Checklist procedures for Division Security Officer in a timely manner. DSS OD will send quarterly reminders to supervisors to complete the PTF, Separation Checklists, and transfer forms.</td>
<td>Virginia Department of Social Services (DSS), Department of Organizational Development (OD) and Department of Information Security and Risk Management (ISRM) concur with the above management point. ISRM has met with Organizational Development to develop a process to notify ISRM when an employee’s employment status is changing (i.e., termination or transfer). This will help ISRM ensure that access is removed when an employee leaves DSS or moves to a position that no longer requires a given system access. ISRM will use exception reports in SAMS (e.g., LDAP to Personnel Data Mismatch, Possible Employee Transfer) to identify users that may have separated or transferred, and will remove the users’ systems access. ISRM has updated the documented standard operating procedure (SOP) for terminating systems access. The SOP now identifies the system access that is not managed in SAMS (e.g., EPPIC ECC) and the corresponding State employee user groups (e.g., the Division of Child Care &amp; Early Childhood Development, Young Williams). This will</td>
<td>No significant differences.</td>
<td></td>
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**FISCAL YEAR 2019**
<table>
<thead>
<tr>
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<th>For Previous Findings Not Corrected or Partially Corrected</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>2018-054</td>
<td>118</td>
<td>Develop Records Retention Requirements and Processes for Case Management System Electronic Records</td>
<td>TANF Cluster -</td>
<td>DSS</td>
<td>Corrective action is ongoing</td>
<td>Change Request (CR435) developed for the records retention requirements. Design will begin by the 2nd Quarter 2019. An incremental methodology by Program AREA will be utilized for the development and implementation. The first program area will be completed by December 2019. (As of 2019, VACMS has not reached the 10 year requirement for the MA program).</td>
<td>The Virginia Department of Social Services, Division of Enterprise Systems has Change Request CR435: Records Purge and Retention tentatively on the schedule for November 2020 release and deployment. The business cites tentative due to IT leadership changes and the fact that agency priorities may cause adjustment to any and all scheduled changes.</td>
<td>Repeat in 2019 APA report.</td>
</tr>
<tr>
<td>2018</td>
<td>2018-058</td>
<td>118</td>
<td>Continue Improving Database Security</td>
<td>TANF Cluster -</td>
<td>DSS</td>
<td>Corrective action is ongoing</td>
<td>DSS Information Security and Risk Management will develop a plan to implement audit, logging, and monitoring security controls over databases in accordance with SEC501 requirements.</td>
<td>The Virginia Department of Social Services, Department of Information Systems and Department of Information Security and Risk Management are dedicating resources to implementing audit logging and monitoring over the databases.</td>
<td>Repeat in 2019 APA report.</td>
</tr>
<tr>
<td>2018</td>
<td>2018-081</td>
<td>118</td>
<td>Ensure Employees Complete Required Conflict of Interest Training</td>
<td>Medicaid Cluster -</td>
<td>DMAS</td>
<td>Corrective action is ongoing</td>
<td>The Human Resources Division (HR) includes a reference to completion of an annual Statement of Economic Interests (SOEI) on all job postings for positions of trust. HR has also added a reference on the job posting about the required Conflict of Interest Act (COI) Training. In addition, employment offer letters state that employees in positions of trust must complete a SOEI at hire and annually thereafter. HR has also added information in employment offer letters about the COI training requirement and their responsibilities. Before new hires who will hold positions of The reason that this is ongoing is that each required filer has a different anniversary date of when to complete the training and it a manual process to track and enforce that the employees take the training every 2 years. The Agency Director granted permission for HR to require that all SOEI filers complete the COI training in January 2020 and annually thereafter. HR initially planned to send an email to the filers when the Ethics Counsel sends notification to complete the SOEI. However, the Ethics Counsel has not posted the</td>
<td>HR continues to do the following with regard to Conflict of Interest Training: 1. References completion of an annual Statement of Economic Interests (SOEI) on all job postings for positions of trust 2. States in employment offer letters that employees in positions of trust must complete a SOEI at hire and annually thereafter 3. States in employment offer letters that 4. Sends an email to the new hire's personal email address to inform them about the required COI training and that they will have to complete the training within the first two months of employment 5. Sent an email on January 7, 2019 as a reminder to everyone that the COI</td>
<td>No differences.</td>
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</tbody>
</table>
Corrective Action and Applicable Deliverables

For Previous Findings Not Corrected or Partially Corrected

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>118</td>
<td>2018-087</td>
<td>Improve Controls over Income Verification for the Temporary Assistance for Needy Family Program(12)</td>
<td>TANF Cluster</td>
<td>-</td>
<td>DSS</td>
<td>Corrective action is ongoing</td>
<td>The Division of Benefit Programs currently has an active change request with the Division of Enterprise Systems to automate the IEVS process. The process is identified as mandatory in the policy manual, therefore there is no need to update the guidance. Additional monitoring of agency processes will be put in place until the change request implementing automation is put in place.</td>
</tr>
<tr>
<td>2018</td>
<td>118</td>
<td>2018-088</td>
<td>Update the Work Verification Plan for the Temporary Assistance for Needy Family Program(13)</td>
<td>TANF Cluster</td>
<td>-</td>
<td>DSS</td>
<td>Corrective action is ongoing</td>
<td>The Work Verification Plan has been updated and will soon be submitted to ACF for approval.</td>
</tr>
</tbody>
</table>

2020 training HR will notify all SOEI filers to complete the training when the 2020 training is available. The annual requirement in January will make it easier to ensure all SOEI filers complete the required training.

Fiscal Year 2019

118 2018-087 Improve Controls over Income Verification for the Temporary Assistance for Needy Family Program(12)

TANF Cluster - DSS Corrective action is ongoing

The Division of Benefit Programs currently has an active change request with the Division of Enterprise Systems to automate the IEVS process. The process is identified as mandatory in the policy manual, therefore there is no need to update the guidance. Additional monitoring of agency processes will be put in place until the change request implementing automation is put in place.

Corrective Action is ongoing. The change request for this process to be automated is scheduled for August 2020.

No significant difference.

Fiscal Year 2018

118 2018-088 Update the Work Verification Plan for the Temporary Assistance for Needy Family Program(13)

TANF Cluster - DSS Corrective action is ongoing

The Work Verification Plan has been updated and will soon be submitted to ACF for approval.

Corrective Action is ongoing. The Work Verification Plan has been updated and will soon be submitted to ACF for approval.

No significant differences.
<table>
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<tr>
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<tbody>
<tr>
<td>2018</td>
<td>118</td>
<td>2018-089</td>
<td>Improve Controls over Federal Performance Reporting(1)</td>
<td>TANF Cluster</td>
<td>-</td>
<td>DSS</td>
<td>Corrective action is ongoing</td>
<td>Findings meeting with Business Areas scheduled for January 24, 2019. Determine if VaCMS Change Request or Defect Tickets need to be developed. Based on the findings defects will be schedule in a 2019 VaCMS release. If Change Request (CR)required, documentation for CR will be developed and the CR will be scheduled for a 2019 release. Corrective action is ongoing. Changes were needed for the TANF Federal Report thru CR 483 which was implemented in the July 2019 VaCMS Release.</td>
<td>No significant difference.</td>
</tr>
<tr>
<td>2018</td>
<td>118</td>
<td>2018-090</td>
<td>Obtain Federal Authorization before Deviating from Cash Management Requirements(1)</td>
<td>TANF Cluster</td>
<td>-</td>
<td>DSS</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>118</td>
<td>2018-092</td>
<td>Improve Process and Controls over Subrecipient Monitoring(1)</td>
<td>TANF Cluster</td>
<td>10.561, 93.558, 93.568, 93.778</td>
<td>DSS</td>
<td>Corrective action is ongoing</td>
<td>Organizational Development staff working with Deputy Commissioner to review, revise, create Department’s new approach to subrecipient monitoring. Corrective Action is ongoing. DSS has hired a Subrecipient Monitoring Specialist who will monitor these Subrecipients.</td>
<td>No significant differences.</td>
</tr>
<tr>
<td>2018</td>
<td>118</td>
<td>2018-093</td>
<td>Ensure that Subrecipient Reviews Adhere to Monitoring Plan(1)</td>
<td>TANF Cluster</td>
<td>10.561, 93.558, 93.568, 93.778</td>
<td>DSS</td>
<td>Corrective action is ongoing</td>
<td>Will be included in new Subrecipient monitoring plan. Corrective Action is ongoing. Finding 2017-032 was marked as FOIAE under §2.2-3705.2 of the Code of Virginia due to its sensitivity and description of security controls. Corrective action updates will be provided to the Auditor of Public Accounts under separate cover.</td>
<td>No significant differences.</td>
</tr>
<tr>
<td>2017</td>
<td>33</td>
<td>2017-015</td>
<td>Develop Processes to Facilitate the Controlling of Privileges in the Claims Processing System</td>
<td>Medicaid Cluster</td>
<td>-</td>
<td>DMAS</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>35</td>
<td>2017-017</td>
<td>Ensure Employees have Proper Access Roles within the Commonwealth’s Procurement System</td>
<td>Medicaid Cluster</td>
<td>-</td>
<td>DMAS</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>66</td>
<td>2017-046</td>
<td>Review and Document Service Organization Control Reports of Third-Party Service Providers</td>
<td>Medicaid Cluster</td>
<td>-</td>
<td>DMAS</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
<td></td>
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<tr>
<td>2017</td>
<td>70</td>
<td>2017-050</td>
<td>Continue Improving Oversight of Third-Party Service Providers</td>
<td>Medicaid Cluster</td>
<td>-</td>
<td>DSS</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
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<tr>
<td>2016</td>
<td>63</td>
<td>2016-044</td>
<td>Improve Oversight of Third Party Service Providers</td>
<td>Medicaid Cluster</td>
<td>-</td>
<td>DSS</td>
<td>See Finding Number 2017-050</td>
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<tr>
<td>2017</td>
<td>85</td>
<td>2017-064</td>
<td>Improve Policies, Procedures, and Plans for Backup and Restoration</td>
<td>Medicaid Cluster</td>
<td>-</td>
<td>DSS</td>
<td>Resolved - Corrective action is completed</td>
<td>Reason for Recurrence:</td>
<td>Corrective Action Taken to Date:</td>
</tr>
<tr>
<td>2016</td>
<td>76</td>
<td>2016-055</td>
<td>Improve Policies, Procedures, and Plans for Backup and Restoration</td>
<td>Medicaid Cluster</td>
<td>-</td>
<td>DSS</td>
<td>See Finding Number 2017-064</td>
<td></td>
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<tr>
<td>2017</td>
<td>118</td>
<td>2017-092</td>
<td>Develop Procedures and Performance Expectations for Resolving Social Security Number Discrepancies</td>
<td>Medicaid Cluster</td>
<td>-</td>
<td>DMAS</td>
<td>Resolved - Corrective action is completed</td>
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<tr>
<td>2018</td>
<td>130</td>
<td>2018-108</td>
<td>Continue to Strengthen Internal Controls over Time and Effort Reporting for Federal Grants</td>
<td>97.042, 97.067</td>
<td>-</td>
<td>DEM</td>
<td>Corrective action is ongoing</td>
<td>Continue strengthening its internal controls over time and effort reporting for federal grants.</td>
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<tr>
<td>2018</td>
<td>131</td>
<td>2018-109</td>
<td>Strengthen Internal Controls over Journal Entries</td>
<td>11.549, 20.703, 97.042, 97.067</td>
<td>$251,648 ($11.549-$61,254, 20.703-$150,203, 97.042-$3,189, 97.045-$18,472, 97.029-$9,265, 97.039-$9,265)</td>
<td>DEM</td>
<td>Corrective action is ongoing</td>
<td>Strengthen internal controls over JE. And ensure the supporting documentation is valid.</td>
</tr>
<tr>
<td>2018</td>
<td>132</td>
<td>2018-110</td>
<td>Improve Controls over Payroll Adjustments</td>
<td>97.039, 97.042, 97.067</td>
<td>$464,392 ($97.039-$147,140, 97.042-$21,142, 97.067-$378,646, 97.029-$14,910, 97.036-$9,265)</td>
<td>DEM</td>
<td>Corrective action is ongoing</td>
<td>Improve controls over payroll adjustment in Cardinal; DEM nor APA were not aware that there is no audit trail within cardinal when changing the speed chart during the CIPPS conversion to Cardinal.</td>
</tr>
<tr>
<td>2018</td>
<td>134</td>
<td>2018-111</td>
<td>Strengthen Internal Controls over Procurement to Ensure that Procurement Records are Complete</td>
<td>97.042, 97.067</td>
<td>-</td>
<td>DEM</td>
<td>Resolved - Corrective action is completed</td>
<td></td>
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<tr>
<td>2018</td>
<td>135</td>
<td>2018-112</td>
<td>Improve Process for Allocating Overhead Costs</td>
<td>97.042, 97.067</td>
<td>-</td>
<td>DEM</td>
<td>Resolved - Corrective action is completed</td>
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<tr>
<td>2017</td>
<td>119</td>
<td>2017-093</td>
<td>Complete Risk Assessments for Subrecipients</td>
<td>16.575</td>
<td>-</td>
<td>DCJS</td>
<td>Resolved - Corrective action is completed</td>
<td>DCJS has developed a review process to ensure that similar errors will not occur in the future. The quarterly federal financial reports submitted to the Department of Justice will be reviewed for accuracy and initiated by the preparer. The Manager of Grants Administration will then review and initial the reports. The Division Director of Finance and Administration will ensure compliance with this new process which will be immediately implemented.</td>
</tr>
</tbody>
</table>

(1) This Finding is also in the "Financial Statement Findings" Section of the "Summary Schedule of Prior Year Audit Findings."
<table>
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<tr>
<th>Federal Agency, Federal Program Name, Cluster Name, or Name of Pass-Through Entity</th>
<th>CFDA Number</th>
<th>Additional Award Information or Identifying Number Assigned by the Pass-Through Entity</th>
<th>Direct Award Expenditures</th>
<th>Pass Through Entity Award Expenditures</th>
<th>Amount Provided to Subrecipients</th>
<th>Program Total or Cluster Total</th>
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<td><strong>U.S. DEPARTMENT OF AGRICULTURE</strong></td>
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<td>Agricultural Research_Basic and Applied Research</td>
<td>10.001</td>
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<td>2,905</td>
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<td>1,579,634</td>
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<td>Plant and Animal Disease, Pest Control, and Animal Care</td>
<td>10.025</td>
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<td>1,244,318</td>
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<td>1,745,129</td>
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<td>Direct and Counter-cyclical Payments Program</td>
<td>10.055</td>
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<td>1,270,033</td>
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<td>Biofuel Infrastructure Partnership</td>
<td>10.117</td>
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<td>2,267,746</td>
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<td>Market Protection and Promotion</td>
<td>10.163</td>
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<td>30,266</td>
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<td>Specialty Crop Block Grant Program - Farm Bill</td>
<td>10.170</td>
<td>026/301-18-029/301-19-035</td>
<td>90,824</td>
<td>81,243</td>
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<td>522,547</td>
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<td>Organic Certification Cost Share Programs</td>
<td>10.171</td>
<td>29,890</td>
<td>29,890</td>
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<td>Local Food Promotion Program</td>
<td>10.172</td>
<td>46,659</td>
<td>48,193</td>
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<td>CFDA Number</td>
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COMMONWEALTH OF VIRGINIA
Schedule of Expenditures of Federal Awards
For the Fiscal Year Ended June 30, 2019
Federal Agency, Federal Program Name, Cluster Name,
or Name of Pass -Through Entity
Outreach and Assistance for Socially Disadvantaged and
Veteran Farmers and Ranchers
Risk Management Education Partnerships
Cooperative Extension Service
Pass-Through From Kansas State University

CFDA
Number

Additional Award Information or Identifying
Number Assigned by the Pass-Through Entity

10.443
10.460
10.500
10.500

Pass-Through From North Carolina State University
State Administrative Expenses for Child Nutrition
Foreign Market Development Cooperator Program
Forestry Research
Pass-Through From United States Endowment For
Forestry & Communities
Cooperative Forestry Assistance
Pass-Through From Georgia Forestry Commission
Wood Utilization Assistance
Pass-Through From United States Endowment For
Forestry & Communities
Forest Health Protection
Partnership Agreements
Soil and Water Conservation
Pass-Through From University of Rhode Island
Environmental Quality Incentives Program

10.500
10.560
10.600
10.652

Pass-Through From Pheasants Forever Incorporated
Regional Conservation Partnership Program
Agricultural Statistics Reports
Technical Agricultural Assistance
Other Assistance
Other Assistance
Other Assistance
Other Assistance
Other Assistance
Other Assistance
Other Assistance
Other Assistance
Other Assistance
Other Assistance
Other Assistance
Other Assistance
Other Assistance
Other Assistance
Pass-Through From Center for Produce Safety
Total Research and Development

10.912
10.932
10.950
10.960
10.RD
10.RD
10.RD
10.RD
10.RD
10.RD
10.RD
10.RD
10.RD
10.RD
10.RD
10.RD
10.RD
10.RD
10.RD

Direct Award
Expenditures

Pass Through Entity
Award Expenditures

Amount Provided to
Subrecipients

210,927
19,313
3,053,656

210,927
19,313
12,156,862
12,156,862

16,259
46,761

12,156,862
4,608,706
45,512
478,223

1,086

478,223
3,205,962
3,205,962
379,496

34,134
45,512
477,137

10.652
10.664
10.664
10.674

346,096
52,792
334,472

10.674
10.680
10.699
10.902
10.902
10.912

6,895
626,117
92,649
1,699
5,775
209,229
418141-19A65A

13-JV-11330145-045
14-JV-11330145-058
14-JV-11330145-108
15-CS-11330140-124
16-CS-11330140-100
16-CS-11330140-101
16-JV-11221639-184
16-JV-11330140-095
16-JV-11330145-074
18-CR-11272152-061
18-JV-11330145-046
AG-3A94-P-17-0094
AT-51245
Contract #W911W61720001
2019CPS12

Total U.S. DEPARTMENT OF AGRICULTURE

Program Total or
Cluster Total

15,400
59,520

4,444
282,290
38,161
734
15,251
23,716
15,900
23,198
32,288
43,501
11,414
115,630
4,785
1,023
7,628
1,800
9,837

34,160

3,781

25,331,677

38,222
2,009,225

1,230,338

1,764,935,666

3,079,978

588,879,825

379,496
1,660,371
92,649
85,487
85,487
918,413
918,413
22,531
282,290
64,662
344,927
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344,927
344,927
344,927
344,927

U.S. DEPARTMENT OF COMMERCE
Band 14 Incumbent Spectrum Relocation
Cluster Grants
Economic Development_Technical Assistance
Interjurisdictional Fisheries Act of 1986
Sea Grant Support
Coastal Zone Management Administration Awards

11.014
11.020
11.303
11.407
11.417 NA18OAR4170083
11.419

686,857
184,873
102,203
173,837
1,445,940
2,618,216

Coastal Zone Management Estuarine Research Reserves
National Oceanic and Atmospheric Administration (NOAA)
Cooperative Institutes
Pass-Through From Mississippi State University
Cooperative Fishery Statistics
Unallied Management Projects
Chesapeake Bay Studies
Pass-Through From Virginia Resource-Use Educational
Council
Unallied Science Program

11.420

319,133

11.432
11.432
11.434
11.454
11.457

362,302
575,955
58,189

11.457
11.472

391,733

386,614
556,644

Atlantic Coastal Fisheries Cooperative Management Act
State and Local Implementation Grant Program
Manufacturing Extension Partnership
Pass-Through From National Institute of Standards and
Technology

11.474
11.549
11.611

220,938
160,958
3,709,058

220,938
160,958
3,765,258

15,000
55,428
619,288

651,687

8,455

18,747
2,000

11.611

686,857
184,873
102,203
173,837
3,194,629
3,013,075

56,200

185,079
362,302
2,398,924
386,614

3,765,258

Arrangements for Interdisciplinary Research Infrastructure 11.619

18,892

Science, Technology, Business and/or Education Outreach

11.620

13,784

68,032

Other Assistance

Support for Annual Conference on Atmospheric
Transport and Dispersion (AT&D) Modeling 201811.U01 204628

2,495

157,307

Pass-Through From Global Science and Technology,
Incorporated

Brightness Temperature(01B-18B) and Gridded
(01B-18a) and Mean Layer Termperature-DG133E11.U02 10-CQ-0034-203914-204538;1056132

FISCAL YEAR 2019

11,574

38,813

566,004

157,307

MANAGEMENT'S SECTION | 186


### Schedule of Expenditures of Federal Awards
For the Fiscal Year Ended June 30, 2019

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<tr>
<th>Program Description</th>
<th>Federal Agency, Federal Program Name, Cluster Name, or Name of Pass-Through Entity</th>
<th>CFDA Number</th>
<th>Additional Award Information or Identifying Number Assigned by the Pass-Through Entity</th>
<th>Direct Award Expenditures</th>
<th>Pass Through Entity Award Expenditures</th>
<th>Amount Provided to Subrecipients</th>
<th>Program Total or Cluster Total</th>
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**U.S. DEPARTMENT OF DEFENSE**

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**FISCAL YEAR 2019**

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**U.S. DEPARTMENT OF JUSTICE**

<p>| Law Enforcement Assistance_Narcotics and Dangerous Drugs Training | 16.004 | | 105,753 | | 105,753 |
| Sexual Assault Services Formula Program | 16.017 | | 484,394 | 484,394 | 484,394 |
| OVW Research and Evaluation Program | 16.026 | | 64,038 | | 64,038 |
| Community-Based Violence Prevention Program | 16.123 | | 14,988 | | 14,988 |
| Services for Trafficking Victims | 16.320 | Human Trafficking /110173;110173 | 116,972 | 11,838 | 116,972 |
| Grants to Reduce Domestic Violence, Dating Violence, Sexual Assault, and Stalking on Campus | 16.525 | | 91,807 | | 91,807 |
| Juvenile Justice and Delinquency Prevention_Allocation to States | 16.540 | | 459,194 | 387,515 | 459,194 |
| Missing Children's Assistance | 16.543 | | 369,859 | | 369,859 |
| State Justice Statistics Program for Statistical Analysis Centers | 16.550 | | 90,457 | | 90,457 |
| National Criminal History Improvement Program (NCCHP) | 16.554 | | 565,300 | | 565,300 |
| National Institute of Justice Research, Evaluation, and Development Project Grants | 16.560 | | 33,544 | | 5,334,313 |
| Crime Victim Assistance | 16.575 | | 45,978,707 | 41,304,616 | 45,978,707 |
| Crime Victim Assistance/Discretionary Grants | 16.582 | | 745,511 | 218,769 | 745,511 |
| Grants to Encourage Arrest Policies and Enforcement of Protection Orders Program | 16.590 | Pass-Through From Action Alliance | 48,499 | 91,050 |
| | | | | 91,050 |
| Pass-Through From Action Alliance | 16.590 | ICR 110917;16-ICIR-OAG | 23,683 | | 91,050 |
| Pass-Through From VA Sexual &amp; Domestic Violence Action Alliance | 16.590 | 16-ICIR-OAG | 18,868 | | 91,050 |
| Residential Substance Abuse Treatment for State Prisoners | 16.593 | | 372,520 | | 372,520 |
| Project Safe Neighborhoods | 16.609 | PSN 112603;112603 | 183,416 | 19,251 | 183,416 |
| Juvenile Mentoring Program | 16.726 | | 18,174 | 2,750 | 100,659 |
| Pass-Through From National 4-H Council | 16.726 | | 82,485 | | 100,659 |
| Edward Byrne Memorial Justice Assistance Grant Program | 16.738 | | 5,510,158 | 3,921,721 | 5,940,364 |
| Edward Byrne Memorial Justice Assistance Grant Program | 16.738 | 18-A426BAD11 | 39,870 | 39,870 | 5,940,364 |
| Edward Byrne Memorial Justice Assistance Grant Program | 16.738 | Danville 112454;112454 | 116,454 | 44,471 | 5,940,364 |
| DNA Backlog Reduction Program | 16.741 | | 1,160,099 | | 1,160,099 |
| Paul Coverdell Forensic Sciences Improvement Grant Program | 16.742 | | 167,017 | | 167,017 |
| Economic High-Tech and Cyber Crime Prevention | 16.752 | | 195,852 | | 256,349 |
| Second Chance Act Reentry Initiative | 16.812 | | 202,613 | | 487,416 |
| Second Chance Act Reentry Initiative | 16.812 | Smart Re-Entry 110172;110172 | 248,190 | 60,657 | 487,416 |</p>
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Research and Development:

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U.S. DEPARTMENT OF LABOR:

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### Commonwealth of Virginia

#### Schedule of Expenditures of Federal Awards

**For the Fiscal Year Ended June 30, 2019**

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<tr>
<th>Federal Agency, Federal Program Name, or Name of Pass-Through Entity</th>
<th>CFDA Number</th>
<th>Additional Award Information or Identifying Number Assigned by the Pass-Through Entity</th>
<th>Direct Award Expenditures</th>
<th>Pass Through Entity Award Expenditures</th>
<th>Amount Provided to Subrecipients</th>
<th>Program Total or Cluster Total</th>
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### FISCAL YEAR 2019
### MANAGEMENT'S SECTION

#### Schedule of Expenditures of Federal Awards
For the Fiscal Year Ended June 30, 2019

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<th>CFDA Number</th>
<th>Additional Award Information or Identifying Number Assigned by the Pass-Through Entity</th>
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<th>Pass Through Entity Award Expenditures</th>
<th>Amount Provided to Subrecipients</th>
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**FISCAL YEAR 2019**

**MANAGEMENT'S SECTION | 202**
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**FISCAL YEAR 2019**

**MANAGEMENT'S SECTION | 203**
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<th>CFDA Number</th>
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<th>Direct Award Expenditures</th>
<th>Pass Through Entity Award Expenditures</th>
<th>Amount Provided to Subrecipients</th>
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### Commonwealth of Virginia

#### Schedule of Expenditures of Federal Awards

For the Fiscal Year Ended June 30, 2019

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<tr>
<th>Federal Agency, Federal Program Name, Cluster Name, or Name of Pass-Through Entity</th>
<th>CFDA Number</th>
<th>Additional Award Information or Identifying Number Assigned by the Pass-Through Entity</th>
<th>Direct Award Expenditures</th>
<th>Pass Through Entity Award Expenditures</th>
<th>Amount Provided to Subrecipients</th>
<th>Program Total or Cluster Total</th>
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#### DEPARTMENT OF TREASURY

| Equitable Sharing | 21.016 | Asset Forfeiture Funds - Federal Treasury Department of Treasury Equitable Sharing Program, | 2,687,239 | 255,319 | 2,687,239 |
| Other Assistance | 21.U01 | Assets Forfeiture Program | 24,134 | 24,134 |
| **Total Excluding Clusters Identified Below** | | | 2,711,373 | 0 | 255,319 |

#### RESEARCH AND DEVELOPMENT

#### APPALACHIAN REGIONAL COMMISSION

| Pass-Through From Industrial Development Authority, Wise County | 23.001 | | 70,283 | 70,283 |
| Appalachian Area Development | 23.002 | | 3,644,000 | 2,658,509 | 3,680,521 |
| Appalachian Research, Technical Assistance, and Demonstration Projects | 23.011 | | 237,108 | 241,365 |
| **Total Excluding Clusters Identified Below** | | | 3,881,108 | 70,283 | 2,658,509 |

#### FEDERAL TRADE COMMISSION

| Research and Development: | | | |
| Interagency Personnel Act Agreement for Bruce Kobayashi-204993 | 36.RD | | 231,555 | 403,715 |
| Interagency Personnel Act Agreement for James Cooper-204542 | 36.RD | | 172,160 | 403,715 |
| **Total FEDERAL TRADE COMMISSION** | | | 403,715 | 0 | 0 |

#### GENERAL SERVICES ADMINISTRATION

| Donation of Federal Surplus Personal Property | 39.003 | | 920,621 | 920,621 |
| **Total GENERAL SERVICES ADMINISTRATION** | | | 920,621 | 0 | 0 |

#### LIBRARY OF CONGRESS

| Books for the Blind and Physically Handicapped | 42.001 | | 32,628 | 32,628 |
| **Total LIBRARY OF CONGRESS** | | | 32,628 | 0 | 0 |

#### NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

| Science | 43.001 | | 107,394 | 11,037,773 |
| Aeronautics | 43.002 | | 103,545 | 1,344,940 |
| Exploration | 43.003 | | 48,440 | 92,092 |
| Pass-Through From Baylor University | 43.003 | | 24,538 | 92,092 |
| Space Operations | 43.007 | | 9,933 | 38,910 |
| Education | 43.008 | | 12,852 | 195,512 |
| Space Technology | 43.012 | | 35,659 | 556,412 |
| Pass-Through From University of Utah | 43.012 | SUB Number 10044107-VCU | | | |
### Schedule of Expenditures of Federal Awards

**For the Fiscal Year Ended June 30, 2019**

<table>
<thead>
<tr>
<th>Federal Agency, Federal Program Name, Cluster Name, or Name of Pass-Through Entity</th>
<th>CFDA Number</th>
<th>Additional Award Information or Identifying Number Assigned by the Pass-Through Entity</th>
<th>Direct Award Expenditures</th>
<th>Pass Through Entity Award Expenditures</th>
<th>Amount Provided to Subrecipients</th>
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</table>
## Schedule of Expenditures of Federal Awards

**For the Fiscal Year Ended June 30, 2019**

### Commonwealth of Virginia

#### Federal Agency, Federal Program Name, Cluster Name, or Name of Pass-Through Entity | CFDA Number | Additional Award Information or Identifying Number Assigned by the Pass-Through Entity | Direct Award Expenditures | Pass Through Entity Award Expenditures | Amount Provided to Subrecipients | Program Total or Cluster Total
---|---|---|---|---|---|---
Other Assistance | 43.RD | Spatiotemporal Innovation Center Membership - Planetary Defense-BONSSC18P1856 204520 | 50,310 | 4,730,290 |
Other Assistance | 43.RD | The Ionospheric Connection Explorer-NNG12FA45C-418124-20002-204233 | 26,071 | 4,730,290 |
Other Assistance | 43.RD | TO 601035 | 103,648 | 4,730,290 |
Pass-Through From Acoustical and Vibrations Engineering Consultants Incorporated | 43.RD | PO 1137 | 43,010 | 4,730,290 |
Pass-Through From Catholic University of America | 43.RD | Inter-cycle Variation of the Coronal Mass Ejection (CME) Occurrence Rate and Kinematic Properties-NNG11PL10A Task 103-204516;361303 SUB 8 | 79,069 | 4,730,290 |
Pass-Through From Catholic University of America | 43.RD | Multi-satellite Observations and Modeling of Solar Energetic Particle Events-NNG11PL10A Task 103-204518;361375 SUB 2 | 13,918 | 4,730,290 |
Pass-Through From Catholic University of America | 43.RD | Operations and science data support for the IRIS mission-NNG11PL10A 204519;361352 SUB 3 | 8,475 | 4,730,290 |
Pass-Through From Catholic University of America | 43.RD | Space Physics Data Facility (SPDF) Science Support-NNG11PL10A Task 128-204514;361328 SUB 3 | 218,039 | 4,730,290 |
Pass-Through From Catholic University of America | 43.RD | Support for Artificial Intelligence Stranding Analysis-NNG11PL10A Task 103-204517;361395 SUB 1 | 19,000 | 4,730,290 |
Pass-Through From Catholic University of America | 43.RD | Understanding the Relations between Coronal Mass Ejections (CMEs) from remote-sensing observations and Interplanetary Coronal Mass Ejections (ICMEs) from in-situ observations-NNG11PL10A Task 600-204579;361600 SUB 1 | 27,329 | 4,730,290 |
Pass-Through From Catholic University of America | 43.RD | 06-001 | 211,900 | 4,730,290 |
Pass-Through From Hampton University | 43.RD | HU-150015 | 51,349 | 4,730,290 |
Pass-Through From Hampton University | 43.RD | Metrosim and Airspace Concept Evaluation System (ACES) Testing to Support New York Novel Airspace Configurations (NYNAC)-NNX16CS70C 204345;2196 | 15,910 | 4,730,290 |
Pass-Through From Intelligent Automation, Incorporated | 43.RD | 1 | 18,046 | 4,730,290 |
Pass-Through From Jacobs Technologies | 43.RD | ENG1016FMS | 42,927 | 4,730,290 |
Pass-Through From Jet Propulsion Laboratory | 43.RD | Geodesy and Cartography-201556;1345925 | 36,405 | 4,730,290 |
Pass-Through From Jet Propulsion Laboratory | 43.RD | Local and Global Cartography and Landing Site Characterization-201553;1345487 | 36,405 | 4,730,290 |
Pass-Through From Jet Propulsion Laboratory | 43.RD | Simulations of Radial Velocity Pre-Cursor Survey Yield for Future Direct Imaging Missions-NNG11PL10A Task 204343;5828918 | 19,515 | 4,730,290 |
Pass-Through From Jet Propulsion Laboratory | 43.RD | The Search for Black Holes in Low Metallicity Dwarf Galaxies: The Power of Keck NIRSPEC-201553;RSA | 12,426 | 4,730,290 |
Pass-Through From Jet Propulsion Laboratory | 43.RD | 1607155 | 9,122 | 4,730,290 |
Pass-Through From Magnolia Optical Technologies, Incorporated | 43.RD | NASAAGU03 | 31,255 | 4,730,290 |
Pass-Through From Materials Research & Design | 43.RD | NNX16C79P/NN07-01-Uva | 36,143 | 4,730,290 |
Pass-Through From National Aeronautics and Space Administration (NASA) | 43.RD | 48020 | 27,444 | 4,730,290 |
Pass-Through From National Aeronautics and Space Administration (NASA) | 43.RD | An Overmassive AGN in a Merging Dwarf Galaxy-NASS-26555-204555;HST-GO-15319.007-A | 4,604 | 4,730,290 |
Pass-Through From National Aeronautics and Space Administration (NASA) | 43.RD | HST-AR-13223.01-A | 42,543 | 4,730,290 |
Pass-Through From National Aeronautics and Space Administration (NASA) | 43.RD | HST-AR-14451.001-A | 17,743 | 4,730,290 |
Pass-Through From National Aeronautics and Space Administration (NASA) | 43.RD | HST-GO-14054.004-A | 26,700 | 4,730,290 |
Pass-Through From National Aeronautics and Space Administration (NASA) | 43.RD | Data System Sustaining Engineering and Support-NNG15CR65C 204520;TVS-2015-10-011 | 2,280,060 | 4,730,290 |
Pass-Through From Universities Space Research Association | 43.RD | SOF 06-0071 | 7,621 | 4,730,290 |
Pass-Through From Universities Space Research Association | 43.RD | SOF 06-0150 | 13,273 | 4,730,290 |
Pass-Through From University of California, Berkeley | 43.RD | SUBCONTRACT 0009423 | 139,175 | 4,730,290 |
Pass-Through From University of Central Florida | 43.RD | 66018028-06 | 26,583 | 4,730,290 |
## Schedule of Expenditures of Federal Awards
### For the Fiscal Year Ended June 30, 2019

<table>
<thead>
<tr>
<th>Federal Agency, Federal Program Name, Cluster Name, or Name of Pass-Through Entity</th>
<th>CFDA Number</th>
<th>Additional Award Information or Identifying Number Assigned by the Pass-Through Entity</th>
<th>Direct Award Expenditures</th>
<th>Pass Through Entity Award Expenditures</th>
<th>Amount Provided to Subrecipients</th>
<th>Program Total or Cluster Total</th>
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<tr>
<td>Pass-Through From University of Colorado at Boulder</td>
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<td>SUBCONTRACT 1556355 Enhancing Airplane State Awareness for Current and Future Operations-NNL16AA15C-204030;W000880292</td>
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**Fiscal Year 2019**

**Management’s Section | 208**
### Schedule of Expenditures of Federal Awards

**For the Fiscal Year Ended June 30, 2019**

<table>
<thead>
<tr>
<th>Pass-Through Entity</th>
<th>CFDA Number</th>
<th>Award Expenditures</th>
<th>Direct Award Expenditures</th>
<th>Amount Provided to Subrecipients</th>
<th>Program Total or Cluster Total</th>
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#### Research and Development:

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<th>Award Expenditures</th>
<th>Direct Award Expenditures</th>
<th>Amount Provided to Subrecipients</th>
<th>Program Total or Cluster Total</th>
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**NUCLEAR REGULATORY COMMISSION**

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Rehabilitation Services_Vocational Rehabilitation Grants to States 84.126 79,677,449 1,025,804 79,677,449
Rehabilitation Long-Term Training 84.129 348,848
National Institute on Disability and Rehabilitation Research 84.133 32,104 42,537
Migrant Education_ Coordination Program 84.144 181,922 90,251 181,922
Rehabilitation Services_ Independent Living Services for Older Individuals Who are Blind 84.177 690,934 690,934
Special Education-Grants for Infants and Families 84.181 11,431,402 7,811,293 11,431,402
Safe and Drug-Free Schools and Communities_National Programs 84.184 639,164 83,073 639,164
Supported Employment Services for Individuals with the Most Significant Disabilities 84.187 843,354 843,354
Education for Homeless Children and Youth 84.196 1,174,233 916,409 1,174,233
Graduate Assistance in Areas of National Need 84.200 246,159 323,847
Centers for International Business Education 84.220 2,700 3,195
Pass-Through From Indiana University 84.220 495 3,195
Assistive Technology 84.224 2,516,302 2,516,302
Rehabilitation Services Demonstration and Training Programs 84.235 886,188 475,092 886,188
Rehabilitation Training_ Continuing Education 84.264 12,326
Pass-Through From University of Wisconsin Stout 84.264 121,294 133,620
Ready to Teach 84.286 88,525 88,525
Twenty-First Century Community Learning Centers 84.287 20,044,223 18,763,268 20,044,223
Education Research, Development and Dissemination 84.305 R305A160398 46,414 24,958 8,598,840
Special Education - State Personnel Development 84.323 1,336,374 674,633 1,336,374
Special Education - Personnel Development to Improve Services and Results for Children with Disabilities 84.325 333,301 1,360,638
Special Education_Technical Assistance and Dissemination to Improve Services and Results for Children with Disabilities 84.326 406,874 489,527
Pass-Through From Helen Keller National Center 84.326 82,654 489,527
Gaining Early Awareness and Readiness for Undergraduate Programs 84.334 3,694,354 3,510,354 3,694,354
Child Care Access Means Parents in School 84.335 1,768 18,106
Teacher Quality Partnership Grants 84.336 1,609,138 547,981 1,609,138
Rural Education 84.358 2,798,477 2,100,738 2,798,477
English Language Acquisition State Grants 84.365 13,510,862 12,695,958 13,510,862
Mathematics and Science Partnerships 84.366 1,436,246 281,211 1,426,246
Improving Teacher Quality State Grants 84.367 33,174,149 33,196,883
Pass-Through From National Writing Project 84.367 22,734 33,196,883
Grants for State Assessments and Related Activities 84.369 5,733,602 5,733,602
School Improvement Grants 84.377 375,789 388,819
Strengthening Minority-Serving Institutions 84.382 442,087 442,087
Investing in Innovation (i3) Fund 84.411 78,254 140,044
Pass-Through From National Writing Project 84.411
Preschool Development Grants 84.419 18,615,010 17,376,459 18,615,010
Supporting Effective Educator Development Program 84.423 3,389,478 3,389,478
Student Support and Academic Enrichment Program 84.424 7,916,653 7,916,653
Other Assistance 84.401 P016A180027 43,739 43,739
Total Excluding Clusters Identified Below 521,259,172 305,470 386,159,356

Special Education Cluster (IDEA):
Special Education_Grants to States 84.007 302,049,655 270,642,761 302,051,851
Pass-Through From Ohio University 84.027 2,196 302,051,851
Special Education_Preschool Grants 84.173 8,629,533 6,697,429 8,713,099
Special Education_Preschool Grants 84.173 University of Lynchburg 51,388 51,388 8,713,099
Special Education_Preschool Grants 84.173 New River Valley Community Services Board 32,178 32,178 8,713,099
Total Special Education Cluster (IDEA) 310,762,754 2,196 277,426,761 310,764,950

Student Financial Assistance Programs:
Federal Supplemental Educational Opportunity Grants 84.007 12,496,266 12,496,266
Federal Work-Study Program 84.033 11,626,778 11,626,778
Federal Perkins Loan - Federal Capital Contributions 84.038 54,526,815 54,526,815
Federal Pell Grant Program 84.063 406,374,650 406,374,650
Federal Direct Student Loans 84.268 1,247,931,236 1,247,931,236
Teacher Education Assistance for College and Higher Education Grants (TEACH Grants) 84.379 237,543 237,543
Postsecondary Education Scholarships for Veteran's Dependents 84.408 5,693 5,693
Total Student Financial Assistance Programs 1,731,198,981 0 1,731,198,981

Trio Cluster:
TRIO_Student Support Services 84.042 5,717,823 326,953 5,717,823
TRIO_Talent Search 84.044 2,016,587 2,016,587
TRIO_Upward Bound 84.047 5,427,500 349,908 5,427,500
TRIO_Educational Opportunity Centers 84.066 483,270 483,270
Total Trio Cluster 13,645,180 0 676,861 13,645,180

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<td>Development of machine learning methodology for estimating, predicting and informing preparedness of students</td>
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**SCHOLARSHIP AND FELLOWSHIP FOUNDATIONS**

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**Other Assistance**

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<th>Direct Award Expenditures</th>
<th>Pass Through Entity Award Expenditures</th>
<th>Amount Provided to Subrecipients</th>
<th>Program Total or Cluster Total</th>
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<tr>
<td>Communication for the Facility Manager Training-PO-730-0000418504-209687</td>
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**Research and Development:**

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**MCC Foreign Assistance for Overseas Programs**

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**Other Assistance**

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**Total SCHOLARSHIP AND FELLOWSHIP FOUNDATIONS**

| Program Total or Cluster Total | 137,083 | 0 | 0 |
### Commonwealth of Virginia

**Schedule of Expenditures of Federal Awards**

For the Fiscal Year Ended June 30, 2019

<table>
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<tr>
<th>Federal Agency, Federal Program Name, Cluster Name, or Name of Pass-Through Entity</th>
<th>CFDA Number</th>
<th>Additional Award Information or Identifying Number Assigned by the Pass-Through Entity</th>
<th>Direct Award Expenditures</th>
<th>Pass Through Entity Award Expenditures</th>
<th>Amount Provided to Subrecipients</th>
<th>Program Total or Cluster Total</th>
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<tr>
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<td>89.003</td>
<td>National Historical Publications and Records Grants</td>
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<td>Federal Agency, Federal Program Name, Cluster Name, or Name of Pass-Through Entity</td>
<td>CFDA Number</td>
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<td>University Centers for Excellence in Developmental Disabilities Education, Research, and Service</td>
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<td>Opioid STR</td>
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<td>Money Follows the Person Rebalancing Demonstration Organized Approaches to Increase Colonorectal Cancer Screening</td>
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<td>Diabetes, Digestive, and Kidney Diseases Extramural Research</td>
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<td>Pass-Through From Harvey Mudd College</td>
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<td>Direct Award Expenditures</td>
<td>Pass Through Entity Award Expenditures</td>
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<td>Grants to States for Operation of Offices of Rural Health HIV Care Formula Grants</td>
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<td>Grants to Provide Outpatient Early Intervention Services with Respect to HIV Disease</td>
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<td>Human Immunodeficiency Virus (HIV)/Acquired Immunodeficiency Virus Syndrome (AIDS) Surveillance Assistance Programs for Chronic Disease Prevention and Control</td>
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<td>Pass-Through From Blue Ridge Behavioral Healthcare Coal Miners Respiratory Impairment Treatment Clinics and Services</td>
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<td>Pass-Through From ChildSavers</td>
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<td>Program Total or Cluster Total</td>
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<td>93.048</td>
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<td>93.051</td>
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**Schedule of Expenditures of Federal Awards**

**For the Fiscal Year Ended June 30, 2019**

**Commonwealth of Virginia**

**Fiscal Year 2019**

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<th>Pass Through Entity Award Expenditures</th>
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**CORPORATION FOR NATIONAL AND COMMUNITY SERVICE**

State Commissions | 94.003 | 364,506 | 4,839,222 |
AmeriCorps | 94.006 | 3,603,389 | 3,603,389 |
Training and Technical Assistance | 94.009 | 203,675 | 203,675 |
Social Innovation Fund Pay for Success | 94.024 | University of Utah | 34,908 | 34,908 |
Total Excluding Clusters Identified Below | 4,171,570 | 3,359,954 |
| | | | | |
Research and Development: Social Innovation Fund | 94.019 | 79,658 | 34,908 |
Pass-Through From WINGS for kids, Incorporated National Service and Civic Engagement Research Competition | 94.026 | 194,926 | 194,926 |
Total Research and Development | 194,926 | 79,658 | 79,658 |
| | | | | |
**TOTAL CORPORATION FOR NATIONAL AND COMMUNITY SERVICE** | 4,366,496 | 114,566 | 3,439,612 |

**EXECUTIVE OFFICE OF THE PRESIDENT**

High Intensity Drug Trafficking Areas Program | 95.001 | 3,641,519 | 3,788,484 |
Pass-Through From MercyHurst University | 95.001 | H1D7A 110512;G19WB0004A | 146,965 | 3,788,484 |
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<td>176,946</td>
<td>39,726</td>
<td></td>
</tr>
</tbody>
</table>
## Research and Development:

- **USDA Foreign Assistance for Programs Overseas**: 98.001, AID-OAA-A-12-00096, 8,030,716, 2,775,492, 9,981,663
- **Pass-Through From Johns Hopkins University**: 98.001, 1,626,913, 48,740, 9,981,663
- **Pass-Through From Kansas State University**: 98.001, 15,841, 9,981,663
- **Pass-Through From University of Georgia**: 98.001, 2,011, 9,981,663
- **Pass-Through From University of Notre Dame**: 98.001, 25,678, 9,981,663
- **Pass-Through From National Academy of Sciences**: 98.001, 33,502, 9,981,663
- **Pass-Through From World Wildlife Fund Incorporated**: 98.001, 2,011, 9,981,663
- **Global Development Alliance**: 98.011, 436,546, 436,546
- **Pass-Through From Tibetan Buddhist Resource Center**: 98.011, 436,546, 436,546
- **USAID Development Partnerships for University Cooperation and Development**: 98.012, 21,458, 21,458
- **Other Assistance**: 98.RD, 685-A-00-10-00194-00, 1,187,929, 1,191,784, 1,191,784
- **Total Research and Development**: 10,845,558, 608,947, 4,402,405

## Total UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT

- **Total Excluding Clusters Identified Below**: 116,038, 0, 0

## Other Federal Assistance

- **American Battle Monuments Commission (ABMC)**: Education Hosting and Maintenance- 204561, 9,600, 116,038
- **Managing Your Business Enterprise (MYBE) Training**: 201817110100001-209690 209695 209701, 36,591, 116,038
- **Trade in Value Added Database Project-ITC-CN-16-0006 204024**: 69,847, 116,038
- **Total Excluding Clusters Identified Below**: 116,038, 0, 0

## Research and Development:

- **Co-Arg: Cogent Argumentation System with Crowd Elicitation-16112300009-204077;002040722 Federal Deposit Insurance Corporation (FDIC)**: 790,226, 121,416, 1,039,408
- **Cyber Security Risk Management for Connected Railroads-DTFRS5317C00018-204358;E2042933**: 50,289, 1,039,408
- **Total Research and Development**: 868,234, 171,174, 121,416
- **Total OTHER FEDERAL ASSISTANCE**: 984,272, 171,174, 121,416

## Grand Total

- **Total Research and Development Cluster for All Federal Agencies**: 14,602,968,801, 139,495,056, 2,332,870,379
- **Total Research and Development Cluster for Student Financial Assistance Program Cluster**: 1,746,467,180, 0, 0

The accompanying notes to the Schedule of Federal Expenditures of Federal Awards are an integral part of this schedule.
COMMONWEALTH OF VIRGINIA
NOTES TO THE SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2019

PURPOSE OF THE SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

The Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance) issued by the Office of Management and Budget (OMB), requires a schedule of expenditures of federal awards showing total federal expenditures for each federal financial assistance program as identified in the Catalog of Federal Domestic Assistance (CFDA). The accompanying schedule includes all expenditures of federal awards of the Commonwealth of Virginia’s departments, institutions, authorities, and component units except for the entities that were not audited by the Auditor of Public Accounts. Other auditors issued reports for the following organizations within the Commonwealth: Virginia Port Authority Including Virginia International Terminals; Institute for Advanced Learning and Research; Virginia Outdoors Foundation; Science Museum of Virginia Foundation; Virginia Housing Development Authority (VHDA); Virginia Resources Authority; Fort Monroe Authority; Commission on Virginia Alcohol Safety Action Program; and the Division of Capitol Police.

1. SIGNIFICANT ACCOUNTING POLICIES

A. Basis of Presentation

The information in the accompanying “Schedule of Expenditures of Federal Awards” is presented in accordance with the Uniform Guidance. The schedule presents a summary of direct award expenditures, pass-through entity award expenditures, and amounts provided to subrecipients by federal department and CFDA Number.

**Federal Financial Assistance** – The Single Audit Act Amendments of 1996 (Public Law 104-156) and the Uniform Guidance define federal financial assistance as grants, loans, loan guarantees, property (including donated surplus property), cooperative agreements, interest subsidies, insurance, food commodities, direct appropriations, or other assistance. Nonmonetary federal assistance, including food stamps, food commodities, and surplus property, is considered federal assistance and, therefore, is reported on the “Schedule of Expenditures of Federal Awards.” Federal financial assistance does not include direct federal cash assistance to individuals. Solicited contracts in a contractor relationship between the Commonwealth of Virginia and the federal government for which the federal government procures tangible goods or services are not considered to be federal financial assistance.
Direct Award Assistance – Assistance received directly from the Federal government or received in a pass-through relationship from other State entities is classified as direct award expenditures on the “Schedule of Expenditures of Federal Awards.”

Pass-Through Entity Federal Assistance – Assistance received in a pass-through relationship from entities other than the Federal government or other State entities is classified as pass-through entity award expenditures on the “Schedule of Expenditures of Federal Awards.”

Amounts Provided to Subrecipients Assistance – Assistance disbursed by the Commonwealth of Virginia to non-state subrecipients is classified as amount provided to subrecipients on the “Schedule of Expenditures of Federal Awards.”

Major Programs – The Single Audit Act Amendments of 1996 and the Uniform Guidance establish the criteria to be used in defining major programs. Major programs for the Commonwealth of Virginia were determined using a risk-based approach in accordance with the Uniform Guidance.

Catalog of Federal Domestic Assistance Number – The Catalog of Federal Domestic Assistance (CFDA) is a government-wide compendium of individual federal programs. Each program included in the catalog is assigned a five-digit program identification number (CFDA Number) and program name. The accompanying schedule and footnotes reflect the program names and CFDA numbers assigned by the https://beta.sam.gov website. Programs without a CFDA number are labeled as Other Assistance and presented using the federal agency’s two-digit prefix followed by U and a two-digit number. If the federal program is part of the Research and Development Cluster (R&D) and the specific program is not known, the federal agency’s two-digit prefix followed by RD is presented. The CFDA numbers used in this audit period were retrieved on July 3, 2019.
Cluster of Programs – Closely related programs that share common compliance requirements are grouped into clusters of programs. A cluster of programs is considered as one federal program for determining major programs. The following are the clusters administered by the Commonwealth:

- Aging
- CCDF
- CDBG-Disaster Recovery Grants
- CDBG-Entitlement Grants
- Child Nutrition
- Clean Water State Revolving Fund
- Disability Insurance/SSI
- Drinking Water State Revolving Fund
- Economic Development
- Employment Service
- Federal Transit
- Fish and Wildlife
- Food Distribution
- Forest Service School and Roads
- Highway Planning and Construction
- Highway Safety
- Medicaid
- Research and Development
- SNAP
- Special Education (IDEA)
- Student Financial Assistance Programs
- TANF
- Transit Services Programs
- TRIO
- WIOA

Student Financial Assistance and Research and Development clusters expend funds from several Federal departments. The amounts expended for these clusters are reported under the appropriate federal department in the accompanying schedule and are also summarized as follows.

The total amount expended for Student Financial Assistance was $1,746,467,180 consisting of the following federal departments:

<table>
<thead>
<tr>
<th>Federal Department</th>
<th>Amount Expended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Education</td>
<td>$1,733,198,981</td>
</tr>
<tr>
<td>Department of Health and Human Services</td>
<td>13,268,199</td>
</tr>
<tr>
<td>Total</td>
<td>$1,746,467,180</td>
</tr>
</tbody>
</table>
The total direct amount expended for Research and Development was $610,194,525 consisting of the following federal departments:

<table>
<thead>
<tr>
<th>Federal Department</th>
<th>Amount Expended</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Department Of Agriculture</td>
<td>$25,331,677</td>
</tr>
<tr>
<td>U.S. Department Of Commerce</td>
<td>7,660,270</td>
</tr>
<tr>
<td>U.S. Department Of Defense</td>
<td>109,571,237</td>
</tr>
<tr>
<td>U.S. Department Of Housing And Urban Development</td>
<td>230,213</td>
</tr>
<tr>
<td>U.S. Department Of The Interior</td>
<td>4,922,815</td>
</tr>
<tr>
<td>U.S. Department Of Justice</td>
<td>5,289,745</td>
</tr>
<tr>
<td>U.S. Department Of State</td>
<td>1,482,218</td>
</tr>
<tr>
<td>U.S. Department Of Transportation</td>
<td>11,768,729</td>
</tr>
<tr>
<td>Appalachian Regional Commission</td>
<td>36,521</td>
</tr>
<tr>
<td>Federal Trade Commission</td>
<td>403,715</td>
</tr>
<tr>
<td>Library Of Congress</td>
<td>33,597</td>
</tr>
<tr>
<td>National Aeronautics And Space Administration</td>
<td>10,755,061</td>
</tr>
<tr>
<td>National Endowment For The Humanities</td>
<td>2,337,086</td>
</tr>
<tr>
<td>National Science Foundation</td>
<td>97,879,380</td>
</tr>
<tr>
<td>U.S. Department Of Veteran'S Affairs</td>
<td>330,298</td>
</tr>
<tr>
<td>Environmental Protection Agency</td>
<td>1,591,040</td>
</tr>
<tr>
<td>Nuclear Regulatory Commission</td>
<td>369,115</td>
</tr>
<tr>
<td>U.S. Department Of Energy</td>
<td>27,188,708</td>
</tr>
<tr>
<td>U.S. Department Of Education</td>
<td>10,882,906</td>
</tr>
<tr>
<td>Scholarship And Fellowship Foundations</td>
<td>36,718</td>
</tr>
<tr>
<td>U.S. National Archives And Records Administration</td>
<td>547,654</td>
</tr>
<tr>
<td>U.S. Department Of Health And Human Services</td>
<td>275,869,030</td>
</tr>
<tr>
<td>Corporation For National And Community Service</td>
<td>194,926</td>
</tr>
<tr>
<td>Social Security Administration</td>
<td>64,534</td>
</tr>
<tr>
<td>Department Of Homeland Security</td>
<td>3,703,540</td>
</tr>
<tr>
<td>United States Agency For International Development</td>
<td>10,845,558</td>
</tr>
<tr>
<td>Other Federal Assistance</td>
<td>868,234</td>
</tr>
<tr>
<td>Total</td>
<td>$610,194,525</td>
</tr>
</tbody>
</table>
B. **Basis of Accounting**

Federal program expenditures included in the accompanying schedule are presented using the cash basis of accounting. Under the cash basis of accounting, expenditures are recognized when cash is disbursed rather than when the obligation is incurred. Federal non-cash assistance and loan/loan guarantee program activities are presented as described in Notes 1C and 1D.

C. **Non-Cash Assistance**

The Commonwealth of Virginia participated in several federal programs in which non-cash benefits are provided through the state to eligible program participants. These include:

**Food Distribution Programs** (CFDA Numbers 10.555, 10.558, 10.559, 10.565, 10.569) The value of food commodities was calculated using the U.S. Department of Agriculture’s Food and Nutrition Service commodity price lists. The accompanying schedule includes commodity distributions of:

<table>
<thead>
<tr>
<th>CFDA #</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.555</td>
<td>$33,030,435</td>
</tr>
<tr>
<td>10.558</td>
<td>$ 4,085</td>
</tr>
<tr>
<td>10.559</td>
<td>$ 246,026</td>
</tr>
<tr>
<td>10.565</td>
<td>$2,841,959</td>
</tr>
<tr>
<td>10.569</td>
<td>$23,572,245</td>
</tr>
</tbody>
</table>

The accompanying schedule does not include Commonwealth-stored undistributed food commodities of:

<table>
<thead>
<tr>
<th>CFDA #</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.555</td>
<td>$ 24,197</td>
</tr>
<tr>
<td>10.569</td>
<td>$ 31,836</td>
</tr>
</tbody>
</table>

**Donation of Federal Surplus Personal Property** (CFDA Number 39.003) – Donated federal surplus property is valued at 23.3 percent of the original acquisition cost as assigned by the federal government. The amount included in the accompanying schedule reflects distribution to other governmental entities during the year ended June 30, 2019. Administrative expenditures of $321,012 are not included in the accompanying schedule. The value of surplus property on hand at June 30, 2019 totaled $791,607.
Childhood Immunization Grants (CFDA Number 93.268) – The U.S. Department of Health and Human Services purchases and distributes immunizations through McKesson, the federal national distribution vendor, directly to our local health departments, private physicians and other providers. The amount presented in the accompanying schedule reflects the cost of immunizations to the federal government of $72,638,796. The remaining amount of $5,728,331 is administrative cost incurred by the Department of Health. The value of inventory on hand at June 30, 2019 is $1,977,954 held by the local Health Departments and $15,209,541 held by other providers.

D. Loan/Loan Guarantee Programs

Federal Perkins Loans - Federal Capital Contributions (CFDA Number 84.038) – The amount in the accompanying schedule includes administrative costs during the fiscal year as well as the outstanding balance of loans receivable at June 30, 2019. Balances outstanding at the end of the audit period were $53,521,959.

Health Professions Student Loans, Including Primary Care Loans/Loans for Disadvantaged Students (CFDA Number 93.342) – The amount in the accompanying schedule includes administrative costs during the fiscal year as well as the outstanding balance of loans receivable at June 30, 2019. Balances outstanding at the end of the audit period were $9,157,236.

Nurse Faculty Loan Program (CFDA Number 93.264) – The amount in the accompanying schedule includes administrative costs during the fiscal year as well as the outstanding balance of loans receivable at June 30, 2019. Balances outstanding at the end of the audit period were $485,584.

Nursing Student Loans (CFDA Number 93.364) – The amount in the accompanying schedule includes administrative costs during the fiscal year as well as the outstanding balance of loans receivable at June 30, 2019. Balances outstanding at the end of the audit period were $2,162,263.

Economic Adjustment Assistance (CFDA Number 11.307) – The amount in the accompanying schedule reflects the cash on hand and the outstanding balance of loans receivable from subrecipients at June 30, 2019. Balances outstanding at the end of the audit period were $20,023,687.
E. Emergency Unemployment Benefits

The amount included in the accompanying schedule for Unemployment Insurance (CFDA Number 17.225) includes $38,475,799 administrative costs, $6,451,974 federal unemployment benefits paid to federal employees, a recoupment of $541,327 in Temporary Extended Unemployment Compensation overpayments, $274,488,521 state unemployment benefits paid to non-federal employees and $1,366,391 in federal benefits paid to Trade Act impacted workers.

F. Program Expenditures

Certain transactions relating to federal financial assistance may appear in the records of more than one state recipient agency. To avoid duplication and the overstatement of the aggregate level of federal financial assistance expended by the Commonwealth of Virginia, the following policies have been adopted:

1. When federal financial assistance is received by one state recipient agency and redistributed to another state agency (i.e., a pass-through of funds by the primary recipient state agency to a subrecipient state agency), the federal financial assistance will be reflected as expenditures by the subrecipient state agency.

2. When federal financial assistance is received by one state agency to purchase goods or services from another state agency, the federal financial assistance will be reflected as expenditures by the recipient (purchaser) agency.

2. DE MINIMIS INDIRECT COST RATE

For the year ended June 30, 2019, only the Department of Game and Inland Fisheries, Department of Forensic Science and the Southern Virginia Higher Education Center have elected to use the de minimis indirect cost rate per Section 200.414 of the Uniform Guidance.
<table>
<thead>
<tr>
<th>Finding Topic/Report Header</th>
<th>Finding Title</th>
<th>Applicable To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finding Number</td>
<td>Finding Title</td>
<td>Department of Human Resource Management</td>
</tr>
<tr>
<td>Financial Accounting and Reporting</td>
<td>Improve Controls Over Financial Reporting</td>
<td>Department of Medical Assistance Services</td>
</tr>
<tr>
<td>2019-001</td>
<td>Improve Controls Over Financial Reporting</td>
<td>Department of Medical Assistance Services</td>
</tr>
<tr>
<td>2019-002</td>
<td>Strengthen Controls over Year-End Accrual Reporting</td>
<td>Department of Medical Assistance Services</td>
</tr>
<tr>
<td>2019-003</td>
<td>Improve Financial Reporting for Accounts Receivable</td>
<td>Department of Medical Assistance Services</td>
</tr>
<tr>
<td>2019-004</td>
<td>Improve Controls over SNAP Payments</td>
<td>Department of Social Services</td>
</tr>
<tr>
<td>2019-005</td>
<td>Dedicate Resources to Timely Update of CAPP Manual Topics</td>
<td>Department of Accounts</td>
</tr>
<tr>
<td>2019-006</td>
<td>Improve Controls Over Financial Systems Reconciliations</td>
<td>Department of Behavioral Health and Developmental Services</td>
</tr>
<tr>
<td>2019-007</td>
<td>Process Expense Reimbursements in the Commonwealth’s Accounting and Financial Reporting System</td>
<td>Department of Behavioral Health and Developmental Services</td>
</tr>
<tr>
<td>2019-008</td>
<td>Perform an Evaluation and Analysis of Potential Asset Retirement and Pollution Remediation Obligations</td>
<td>Department of Behavioral Health and Developmental Services</td>
</tr>
<tr>
<td>2019-009</td>
<td>Improve Review Process for Individual Facility Leave Liability Submissions</td>
<td>Department of Behavioral Health and Developmental Services</td>
</tr>
<tr>
<td>2019-010</td>
<td>Improve Financial Reporting of Infrastructure Assets</td>
<td>Department of Transportation</td>
</tr>
<tr>
<td>2019-011</td>
<td>Improve Financial Reporting Classification within Net Position</td>
<td>Department of Transportation</td>
</tr>
<tr>
<td>2019-012</td>
<td>Improve Policies and Procedures over Unclaimed Property Reconciliations</td>
<td>Department of the Treasury</td>
</tr>
<tr>
<td>2019-013</td>
<td>Improve the Expense Allocation Process</td>
<td>Department of Health</td>
</tr>
<tr>
<td>Access Controls</td>
<td>Develop and Implement Compliant Application Access Management Procedures</td>
<td>Department of Behavioral Health and Developmental Services</td>
</tr>
<tr>
<td>2019-014</td>
<td>Develop and Implement Compliant Application Access Management Procedures</td>
<td>Department of Behavioral Health and Developmental Services</td>
</tr>
<tr>
<td>2019-015</td>
<td>Promptly Remove Commonwealth’s Accounting and Financial Reporting System User Access</td>
<td>Department of Behavioral Health and Developmental Services</td>
</tr>
<tr>
<td>2019-016</td>
<td>Develop Access Profile Descriptions and Improve Monitoring Controls over the Internal Attendance and Leave System</td>
<td>Department of Behavioral Health and Developmental Services</td>
</tr>
<tr>
<td>2019-017</td>
<td>Improve Access Controls over the Commonwealth’s Payroll System</td>
<td>Department of Behavioral Health and Developmental Services</td>
</tr>
<tr>
<td>2019-018</td>
<td>Improve Controls Over Access to the Commonwealth’s Retirement Benefits System</td>
<td>Department of Behavioral Health and Developmental Services</td>
</tr>
<tr>
<td>2019-019</td>
<td>Improve Timely Removal of Critical System Access</td>
<td>Department of Health</td>
</tr>
<tr>
<td>2019-020</td>
<td>Perform System Access Reviews</td>
<td>Department of Health</td>
</tr>
<tr>
<td>2019-021</td>
<td>Improve Segregation of Duties Controls over the Payroll and Human Resources System</td>
<td>University of Virginia</td>
</tr>
<tr>
<td>2019-022</td>
<td>Improve Process for Terminating Access to the Commonwealth’s Retirement Benefits System</td>
<td>University of Virginia</td>
</tr>
<tr>
<td>2019-023</td>
<td>Improve Patient Accounting, Billing, and Management System Segregation of Duties</td>
<td>University of Virginia-Medical Center</td>
</tr>
<tr>
<td>2019-024</td>
<td>Remove Separated Employee Access in a Timely Manner</td>
<td>Department of Medical Assistance Services</td>
</tr>
<tr>
<td>2019-025</td>
<td>Continue to Improve Controls Over Role Access</td>
<td>Department of Taxation</td>
</tr>
<tr>
<td>2019-026</td>
<td>Continue to Improve Information System Access Controls</td>
<td>Department of the Treasury</td>
</tr>
<tr>
<td>2019-027</td>
<td>Improve Access Controls to Critical Systems</td>
<td>Department of Social Services</td>
</tr>
<tr>
<td>2019-028</td>
<td>Continue Improving Controls for Processing Access Terminations and Changes</td>
<td>Department of Motor Vehicles</td>
</tr>
<tr>
<td>2019-029</td>
<td>Perform Annual Access Review of Information Systems</td>
<td>Department of Connections Central Administration</td>
</tr>
<tr>
<td>2019-030</td>
<td>Improve Logical Access Controls for Users with Privileged Access</td>
<td>Virginia Alcoholic Beverage Control Authority</td>
</tr>
<tr>
<td>2019-031</td>
<td>Improve Database Security</td>
<td>Virginia Alcoholic Beverage Control Authority</td>
</tr>
<tr>
<td>Multiple Information System Security Control Centers</td>
<td>Improve Web Application Security</td>
<td>Department of Accounts</td>
</tr>
<tr>
<td>2019-033</td>
<td>Improve Web Application Security</td>
<td>Department of Accounts</td>
</tr>
<tr>
<td>2019-034</td>
<td>Improve the Budget System Database Governance and Security</td>
<td>Department of Planning and Budget</td>
</tr>
<tr>
<td>2019-035</td>
<td>Improve Web Application Security</td>
<td>Department of Behavioral Health and Developmental Services</td>
</tr>
<tr>
<td>2019-036</td>
<td>Improve Access Controls over the Internal Accounting and Patient Revenue Systems</td>
<td>Department of Behavioral Health and Developmental Services</td>
</tr>
<tr>
<td>2019-037</td>
<td>Improve Web Application Security</td>
<td>Department of Social Services</td>
</tr>
<tr>
<td>2019-038</td>
<td>Improve IT Change and Configuration Management Process</td>
<td>Department of Social Services</td>
</tr>
<tr>
<td>2019-039</td>
<td>Improve Web Application Security</td>
<td>Department of Health</td>
</tr>
<tr>
<td>2019-040</td>
<td>Improve Server Operating System Security</td>
<td>Virginia Lottery</td>
</tr>
<tr>
<td>2019-041</td>
<td>Improve Vulnerability Remediation Efforts</td>
<td>Department of Education - Central Office Operations; Virginia Information Technologies Agency</td>
</tr>
<tr>
<td>2019-042</td>
<td>Improve Web Application Security</td>
<td>Department of Education - Central Office Operations</td>
</tr>
<tr>
<td>2019-043</td>
<td>Improve Database Security</td>
<td>Virginia Alcoholic Beverage Control Authority</td>
</tr>
<tr>
<td>2019-044</td>
<td>Improve Database Security</td>
<td>Virginia Employment Commission</td>
</tr>
<tr>
<td>Contingency Planning</td>
<td>Improve IT Contingency Management Program</td>
<td>Department of Behavioral Health and Developmental Services</td>
</tr>
<tr>
<td>2019-045</td>
<td>Improve IT Contingency Management Program</td>
<td>Department of Behavioral Health and Developmental Services</td>
</tr>
<tr>
<td>2019-046</td>
<td>Improve Disaster Recovery for Sensitive Systems</td>
<td>Department of Behavioral Health and Developmental Services</td>
</tr>
<tr>
<td>2019-047</td>
<td>Improve Contingency Management Program</td>
<td>Department of Health</td>
</tr>
<tr>
<td>2019-048</td>
<td>Improve the Disaster Recovery Plan</td>
<td>Department of Health</td>
</tr>
<tr>
<td>2019-049</td>
<td>Continue to Improve Disaster Recovery Planning Documentation</td>
<td>Department of Social Services</td>
</tr>
<tr>
<td>2019-050</td>
<td>Develop Records Retention Requirements and Processes for Case Management System</td>
<td>Department of Taxation</td>
</tr>
<tr>
<td>System and Services Acquisition</td>
<td>Complete and Approve the System Security Plan</td>
<td>Department of Medical Assistance Services</td>
</tr>
<tr>
<td>2019-051</td>
<td>Complete and Approve the System Security Plan</td>
<td>Department of Medical Assistance Services</td>
</tr>
<tr>
<td>2019-052</td>
<td>Develop a Process to Maintain Oversight for Third-Party Providers</td>
<td>Department of Social Services</td>
</tr>
<tr>
<td>2019-053</td>
<td>Create Processes for Review and Assessment of Third-Party Service Provider’s Controls</td>
<td>Department of Behavioral Health and Developmental Services</td>
</tr>
<tr>
<td>2019-054</td>
<td>Practice Oversight of Service Providers Throughout the Lifecycle of a Project</td>
<td>Department of Motor Vehicles</td>
</tr>
<tr>
<td>Awareness and Training</td>
<td>Improve Security Awareness Training Program</td>
<td>University of Virginia-Academic Division</td>
</tr>
<tr>
<td>2019-055</td>
<td>Improve Security Awareness Training Program</td>
<td>Virginia Alcoholic Beverage Control Authority</td>
</tr>
<tr>
<td>Finding Number</td>
<td>Finding Title</td>
<td>Applicable To</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td>2019-057</td>
<td>Improve Web Application Security Controls</td>
<td>Department of Human Resource Management</td>
</tr>
<tr>
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# Listing of Findings Grouped by Topic

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APPENDIX I

APPLICABLE MANAGEMENT CONTACTS FOR FINDINGS AND QUESTIONED COSTS

Department for Aging and Rehabilitative Services
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(804) 692-7123  
bsmith@valottery.com
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC</td>
<td>Virginia Alcoholic Beverage Control Authority</td>
</tr>
<tr>
<td>ACF</td>
<td>Administration of Children and Families</td>
</tr>
<tr>
<td>APSPM</td>
<td>Agency Procurement and Surplus Property Manual</td>
</tr>
<tr>
<td>ARMICS</td>
<td>Agency Risk Management and Internal Control Standards</td>
</tr>
<tr>
<td>BIA</td>
<td>Business Impact Analysis</td>
</tr>
<tr>
<td>CAFR</td>
<td>Comprehensive Annual Financial Report</td>
</tr>
<tr>
<td>CAPP</td>
<td>Commonwealth Accounting Policies and Procedures</td>
</tr>
<tr>
<td>CE</td>
<td>Consultative Examination</td>
</tr>
<tr>
<td>CFDA</td>
<td>Code of Federal Domestic Assistance</td>
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<tr>
<td>C.F.R.</td>
<td>Code of Federal Regulations</td>
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<tr>
<td>CIS</td>
<td>Center for Internet Security</td>
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<tr>
<td>COIA</td>
<td>Conflict of Interests Act</td>
</tr>
<tr>
<td>COOP</td>
<td>Continuity of Operations Plan</td>
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<tr>
<td>COV</td>
<td>Commonwealth of Virginia</td>
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<tr>
<td>CP</td>
<td>Contingency Plan</td>
</tr>
<tr>
<td>CSB</td>
<td>Community Service Board</td>
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<tr>
<td>CUEC</td>
<td>Complementary User Entity Control</td>
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<tr>
<td>DBHDS</td>
<td>Department of Behavioral Health and Developmental Services</td>
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<tr>
<td>DI</td>
<td>Disability Insurance</td>
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<tr>
<td>DRP</td>
<td>Disaster Recovery Plan</td>
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<tr>
<td>EBT</td>
<td>Electronic Benefits Transfer</td>
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<tr>
<td>ECOS</td>
<td>Enterprise Cloud Oversight Service</td>
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<tr>
<td>FAMIS</td>
<td>Family Access to Medical Insurance Security</td>
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<tr>
<td>FNS</td>
<td>Food and Nutrition Service</td>
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<td>FOIA</td>
<td>Freedom of Information Act</td>
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<tr>
<td>FOIAE</td>
<td>Freedom of Information Act Exempt</td>
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<tr>
<td>GASB</td>
<td>Governmental Accounting Standards Board</td>
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<tr>
<td>HIPAA</td>
<td>Health Insurance Portability and Accountability Act</td>
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<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
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<td>HR</td>
<td>Human Resources</td>
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<td>IEC</td>
<td>International Electrotechnical Commission</td>
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<tr>
<td>IEVS</td>
<td>Income Eligibility and Verification System</td>
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<tr>
<td>ISO</td>
<td>Information Security Officer</td>
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<tr>
<td>IT</td>
<td>Information Technology</td>
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<td>ITS</td>
<td>Information Technology Services</td>
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<tr>
<td>LMS</td>
<td>Learning Management System</td>
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<tr>
<td>MOU</td>
<td>Memorandum of Understanding</td>
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<tr>
<td>NIST</td>
<td>National Institute of Standards and Technology</td>
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<tr>
<td>NSLDS</td>
<td>National Student Loan Data System</td>
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<tr>
<td>OPEB</td>
<td>Other Postemployment Benefits</td>
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<tr>
<td>Partnership</td>
<td>VITA's Contractual Partnership with Various IT Service Providers</td>
</tr>
<tr>
<td>POMS</td>
<td>Program Operations Manual System</td>
</tr>
<tr>
<td>QAA</td>
<td>Quality Assurance and Accountability</td>
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<tr>
<td>Acronym</td>
<td>Definition</td>
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<tr>
<td>SaaS</td>
<td>Software as a Service</td>
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<td>SAS</td>
<td>Shared Administrative Services</td>
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<td>SAT</td>
<td>Security Awareness Training</td>
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<tr>
<td><strong>Security Standard</strong></td>
<td>Commonwealth’s Information Security Standard, SEC 501</td>
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<tr>
<td>SI</td>
<td>System and Information Integrity</td>
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<tr>
<td>SNAP</td>
<td>Supplemental Nutrition Assistance Program</td>
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<td>SOC</td>
<td>Service Organization Control</td>
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<tr>
<td>SOEI</td>
<td>Statement of Economic Interests</td>
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<tr>
<td>SOR</td>
<td>State Opioid Response</td>
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<tr>
<td>SSI</td>
<td>Supplemental Security Income</td>
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<tr>
<td>SSP</td>
<td>System Security Plan</td>
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<tr>
<td>STR</td>
<td>State Targeted Response</td>
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<tr>
<td>TANF</td>
<td>Temporary Assistance for Needy Families</td>
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<tr>
<td>UI</td>
<td>Unemployment Insurance</td>
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<tr>
<td>VITA</td>
<td>Virginia Information Technologies Agency</td>
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<tr>
<td>VR</td>
<td>Vocational Rehabilitation</td>
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<tr>
<td>VRS</td>
<td>Virginia Retirement System</td>
</tr>
<tr>
<td>WIC</td>
<td>Women, Infants, and Children</td>
</tr>
</tbody>
</table>
Department of Health and Human Services
Office of Inspector General
Office of Audit Services
National External Audit Review Center
1100 Walnut Street, Suite 850
Kansas City, MO 64106

To Whom It May Concern:

In addition to promptly taking corrective action on all findings, in accordance with CFR §200.511 Audit findings follow-up (c) Corrective action plan, the State Comptroller of Virginia (auditee) has prepared, in a document separate from the auditor's findings described in CFR §200.516 Audit findings, a corrective action plan to address each audit finding included in the current year auditor's report. The corrective action plan also cites findings relating to the financial statements, which are required to be reported in accordance with Generally Accepted Government Auditing Standards. The corrective action plan cites the reference number the auditor assigned to each auditing finding, name(s) of the contact person(s) responsible for corrective action, the corrective action planned, and the anticipated completion date. The corrective action plan does not express a disagreement with any of the audit findings nor does it disclose that corrective action is not required.

Certain corrective actions planned are not contained in this corrective action plan because they contain descriptions of security mechanisms and are Freedom of Information Act Exempt under §2.2-3705.2 of the Code of Virginia. Federal awarding agencies or pass-through entities needing such information in formulating their management decisions as required by CFR §200.521 Management decision, should communicate with the contact person responsible for the respective corrective action planned to address the audit finding.

The Commonwealth of Virginia Single Audit Report for the Year Ended June 30, 2019 containing all findings can be found at www.apa.virginia.gov or is available from the Federal Audit Clearinghouse web site.

If you have any questions, please contact our office at (804) 225-2109.

Sincerely,

David A. Von Moll
State Comptroller of Virginia
<table>
<thead>
<tr>
<th>Audit Finding Reference Number</th>
<th>Responsible Contact Person(s)</th>
<th>Planned Corrective Action</th>
<th>Did Text contain a chart or table?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve Controls Over Financial Reporting 2019-001 DHRM</td>
<td>Richard Whitfield - DHRM Contracts and Finance Director, Jian Martin - DHRM Fiscal Officer, Nga Huynh - DHRM Financial Analyst</td>
<td>Corrective Action Planned: For FY20: Allocation percentage and census data has been delivered to Actuary and Actuary agreed to deliver the actuary report, collection methodology, &amp; appendixes on April 1, 2020. DHRM is scheduled to complete FY20 schedule of benefit payment, Sample Journal entry, &amp; note disclosures by May 1, 2020. For FY21 and forward: Allocation percentage and census data will be delivered to Actuary no later than November 1. Actuary agreed to deliver the actuary report, collection methodology, &amp; appendixes on March 1. DHRM is to complete schedule of benefit payment, Sample Journal entry, &amp; note disclosures by May 1, 2020. Contract modification will be finished by March 1, 2020 to address FY20 and future contract years deadline. Estimated Completion Date: 3/31/2020</td>
<td>No</td>
</tr>
<tr>
<td>Strengthen Controls over Year-End Accrual Reporting 2019-002 DMAS</td>
<td>Shionda Scott - Co-Acting Fiscal Division Director, Mike Harlow - Co-Acting Fiscal Division Director</td>
<td>Corrective Action Planned: The Budget, Fiscal, and Provider Reimbursement Divisions will meet by August 15, 2020 to discuss and document the approach to be taken for estimating accruals. This early meeting will allow the divisions to set a schedule and approach to accrual estimation; even though key accruals will not be available until after September 1st. This lead time will help staff accumulate, compile, and review the accruals data as it comes in. We met with the Department of Accounts and APA on November 19, 2020 to clarify reporting periods. The Budget Division will update the accrual spreadsheets to provide greater detail on the source(s) and calculations of the data in accordance with the Chief Financial Officer’s Excel governance plan by September 1, 2020. This will create accountability for the data and provide a more efficient and effective review by management. To mitigate potential variance in the methodology for calculating an estimate of a Private Hospital Enhanced Rate Payment liability, the Provider Reimbursement Division will report all supplemental payment information to the Budget division for the previous fiscal year by August 31st. This will allow Budget to more accurately estimate the Private Hospital Enhanced Rate Payment liability. The Budget Division will document its management review of the accruals prior to submission to the Fiscal Division. The Fiscal Division will document the CFO’s review and approval of the year-end accrual reporting plan by September 1, 2020. As new programs and/or revenue are implemented in DMAS, the Fiscal and Budget Divisions will contact the Department of Accounts to ensure proper treatment of revenues and expenditures as well as the Department of Planning and Budget for any appropriation concerns. Estimated Completion Date: 9/30/2020</td>
<td>No</td>
</tr>
<tr>
<td>Improve Financial Reporting for Accounts Receivable 2019-003 DMAS</td>
<td>Shionda Scott - Co-Acting Fiscal Division Director, Mike Harlow - Co-Acting Fiscal Division Director</td>
<td>Corrective Action Planned: The DMAS Internal Audit Division will conduct an analysis of the historical collection data as part of its scope during an audit of Accounts Receivable processes. This analysis will help substantiate an updated process for estimate uncollectible accounts. The audit is scheduled to conclude in May 2020, wherein the Accounts Receivable Manager will be able to use the analysis to update the fiscal collections policies and procedures for reasonably estimating the uncollectible accounts by June 30, 2020. The policy will be reviewed and approved by the CFO by June 10, 2020 with an implementation date of July 1, 2020. Estimated Completion Date: 9/30/2020</td>
<td>No</td>
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<tr>
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</tbody>
</table>
| Improve Controls over SNAP Payments 2019-004 DSS | Responsible Contact Person(s): Ida Witherspoon - Chief Financial Officer  
Corrective Action Planned: DSS does not have sufficient controls over payments made for the Supplemental Nutrition Assistance program (SNAP). Social Services’ Division of Enterprise Systems (Enterprise Systems) and Finance did not initially resolve the discrepancies between the systems and therefore could not provide support for $234 million out of $1,013 million (23%) that was paid out by the vendor and drawn down from the federal government. After APA brought this issue to management’s attention, Finance and Enterprise Systems were able to work together to provide evidence that the total amount authorized by the case management system reasonably agreed to the total amount the vendor put on the EBT cards. Since the audit, Finance has worked with Information Technology to correct the VaCMS EBT Reconciliation Report to properly account for all transaction types. The beginning balance has been updated in VaCMS and the report and reconciliation process are currently working. Finance will bring discrepancies between VaCMS and Conduent to the attention of Information Technology management within 24 hours of discovery for research of the underlying information. If the discrepancy cannot be resolved, Finance will also bring this to the attention of Benefit Programs management and the CFO. Finance has also begun requiring supervisor approval of the SNAP EBT on the monthly reconciliation.  
Estimated Completion Date: 1/31/2020 | No |
| Dedicate Resources to Timely Update of CAPP Manual Topics 2019-005 DOA | Responsible Contact Person(s): Amanda Simpson - Director of Compliance Oversight and Federal Reporting  
Corrective Action Planned: DOA acknowledges the importance of updating the Commonwealth Accounting Policies and Procedures (CAPP) Manual, and DOA agrees that the topics cited were not updated by June 30, 2019. However, DOA disagrees with the severity of the impact related to these topics. DOA prioritized the CAPP topics when the new accounting system was placed in service and all topics with substantive changes were updated. The five topics that remained were assessed as low priority since no substantive changes that would impact either accounting or reporting accuracy were required. As a mitigating control, Cardinal Job Aids and/or training materials provided guidance to effectively provide assistance with any terminology or coding changes that the agencies might require. These topics were updated by December 31, 2019. Regarding the payroll CAPP topics, DOA does not plan to divert resources from the Human Capital Management (HCM) Project to update CAPP topics for CIPPS and the associated payroll business processes, which are scheduled to be replaced in October of 2021. Management does not believe this would be an appropriate use of the agency’s limited resources. To mitigate any associated risk, DOA is providing detailed and specific payroll processing guidance via Payroll Bulletins to agency fiscal and payroll personnel. DOA will revise all Payroll topics as the new HCM module is placed in service.  
Estimated Completion Date: 12/31/2019 | No |
| Improve Controls Over Financial Systems Reconciliations 2019-006 DBHDS | Responsible Contact Person(s): Andrew Diefenthaler - Chief Financial Officer, Ken Gunn - Director of Budget Execution and Financial Reporting  
Corrective Action Planned: All facilities are aware of current reconciliation requirements. DBHDS will work with facilities to improve reconciliation documentation and ensure standard recon sign-offs are performed. DBHDS Finance has already established quarterly facility CFO meetings where these issues will be presented and resolved. Documentation requirements will be formalized. Training will be provided as necessary.  
Estimated Completion Date: 2/20/2020 | No |
| Process Expense Reimbursements in the Commonwealth’s Accounting and Financial Reporting System 2019-007 DBHDS | Responsible Contact Person(s): Andrew Diefenthaler - Chief Financial Officer, Ken Gunn - Director of Budget Execution and Financial Reporting, John Moore - Director of Fiscal Services and Grants Management  
Corrective Action Planned: CVTC will be closed effective June 2020. This finding was the result of staffing shortages for a facility in transition.  
Estimated Completion Date: 2/1/2020 | No |
<table>
<thead>
<tr>
<th>Audit Finding Reference Number</th>
<th>Planned Corrective Action</th>
<th>Did Text contain a chart or table?</th>
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<tbody>
<tr>
<td>Perform an Evaluation and Analysis of Potential Asset Retirement and Pollution Remediation Obligations 2019-008 DBHDS</td>
<td>Responsible Contact Person(s): Andrew Diefenthaler - Chief Financial Officer, Ken Gunn - Director of Budget Execution and Financial Reporting, John Moore - Director of Fiscal Services and Grants Management Corrective Action Planned: DBHDS will continue its standard process and procedure of communicating GASB requirements to its facilities related to asset retirement to include criteria for ARO. This will also include coordination with our facilities with reasonableness checks and with our Office of A and E Services to ensure that ARO issues are not present. Estimated Completion Date: 2/1/2020</td>
<td>No</td>
</tr>
<tr>
<td>Improve Review Process for Individual Facility Leave Liability Submissions 2019-009 DBHDS</td>
<td>Responsible Contact Person(s): Andrew Diefenthaler - Chief Financial Officer, Ken Gunn - Director of Budget Execution and Financial Reporting Corrective Action Planned: DBHDS has developed a comparative analysis tool that will be used by each facility when computing leave liability. The tool provides the previous year’s leave liability total by fund and program and will be used to compare to the current year leave liability calculation. The Central Office will use a consolidated version of this tool to determine that leave calculations are reasonable. Estimated Completion Date: 7/1/2020</td>
<td>No</td>
</tr>
<tr>
<td>Improve Financial Reporting of Infrastructure Assets 2019-010 VDOT</td>
<td>Responsible Contact Person(s): Greg Lehman - Assistant Controller of General Accounting and Financial Reporting Corrective Action Planned: VDOT will improve and update our procedures and methodology for reporting of Infrastructure. This includes working with other divisions to better understand the data in ancillary systems as it relates to the reporting categories VDOT use for financial reporting. We are also working with other states to knowledge share and identify best practices. Estimated Completion Date: 6/30/2020</td>
<td>No</td>
</tr>
<tr>
<td>Improve Financial Reporting Classification within Net Position 2019-011 VDOT</td>
<td>Responsible Contact Person(s): Greg Lehman - Assistant Controller of General Accounting and Financial Reporting Corrective Action Planned: VDOT will update our internal procedures to ensure refinanced debt is appropriately allocated within net position. Estimated Completion Date: 6/30/2020</td>
<td>No</td>
</tr>
<tr>
<td>Improve Policies and Procedures over Unclaimed Property Reconciliations 2019-012 TD</td>
<td>Responsible Contact Person(s): Vicki Bridgeman - Director of Unclaimed Property Corrective Action Planned: The Unclaimed Property Division (UCP) will improve its reconciliation procedures to ensure a timely review and a clear audit trail. These improved procedures will follow guidance provided in the CAPP manual. Estimated Completion Date: 6/30/2020</td>
<td>No</td>
</tr>
<tr>
<td>Improve the Expense Allocation Process 2019-013 VDH</td>
<td>Responsible Contact Person(s): Stacey Ferrer - Director of Financial Management Corrective Action Planned: Office of Financial Management will evaluate the current practice and implement the necessary procedures to ensure that the review of the allocation process is performed annually and expenses are properly allocated among the appropriate funding streams. Estimated Completion Date: 7/1/2020</td>
<td>No</td>
</tr>
<tr>
<td>Develop and Implement Compliant Application Access Management Procedures 2019-014 DBHDS</td>
<td>Responsible Contact Person(s): Robert Hobbelman - CIO, Gerald Bullock - Acting CISO Corrective Action Planned: DBHDS will work with its facilities to ensure their procedures match the Agency’s existing Policy. Estimated Completion Date: 10/1/2020</td>
<td>No</td>
</tr>
<tr>
<td>Promptly Remove Commonwealth’s Accounting and Financial Reporting System User Access 2019-015 DBHDS</td>
<td>Responsible Contact Person(s): Andrew Diefenthaler - Chief Financial Officer, Ken Gunn - Director of Budget Execution and Financial Reporting Corrective Action Planned: DBHDS will work with our security function to address these issues. Specifically, DBHDS Finance will review current internal access procedures for reasonableness and make changes where appropriate. Communication among offices as to timing of termination has been a contributing factor - DBHDS will make process improvements related to separation of employees. Estimated Completion Date: 7/1/2020</td>
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<tr>
<td>Develop Access Profile Descriptions and Improve Monitoring Controls over the Internal Attendance and Leave System 2019-016 DBHDS</td>
<td>Responsible Contact Person(s): Robert Hobbelman - CIO, Don Tyson - IT Manager Corrective Action Planned: DBHDS will develop access capability descriptions for access profiles for the internal time, attendance and leave system. In addition, a process will be developed and implemented to ensure all DBHDS facilities and Central Office performs and documents a complete review of all users at least annually. Central Office will also review all facility submissions to ensure completeness of access reviews. Estimated Completion Date: 8/1/2020</td>
<td>No</td>
</tr>
<tr>
<td>Improve Access Controls over the Commonwealth's Payroll System 2019-017 DBHDS</td>
<td>Responsible Contact Person(s): Andrew Diefenthaler - Chief Financial Officer, Ken Gunn - Director of Budget Execution and Financial Reporting, John Moore - Director of Fiscal Services and Grants Management Corrective Action Planned: DBHDS Finance will work with our security function to address these issues. Specifically it will review current internal procedures for reasonableness and make changes where appropriate. Given that the environment is one of frequent turnover this will require coordination with the security function to establish adequate but reasonable time frames for removal from the system. Given DBHDS's operating environment, 24 hours may not be achievable. Estimated Completion Date: 7/1/2020</td>
<td>No</td>
</tr>
<tr>
<td>Improve Controls Over Access to the Commonwealth's Retirement Benefits System 2019-018 DBHDS</td>
<td>Responsible Contact Person(s): Stacy Pendleton - HR Director Corrective Action Planned: Will review VRS user roles and requirements for access. Will train on requirement to disable access within 24 hours of separation. DBHDS met with the APA to discuss these findings. We will provide a training presentation at the HR Forum in April. Estimated Completion Date: 5/1/2020</td>
<td>No</td>
</tr>
<tr>
<td>Improve Timely Removal of Critical System Access 2019-019 VDH</td>
<td>Responsible Contact Person(s): Rebecca Bynum - Director of Human Resources Corrective Action Planned: The Office of Human Resources (OHR) will evaluate and update policies and procedures, as necessary, to provide instruction for proper removal of staff that are separate or no longer need access. OHR will provide communication re: policies and procedures to agency business partners, including managers responsible for initiating and assuring proper separation actions. Estimated Completion Date: 6/20/2020</td>
<td>No</td>
</tr>
</tbody>
</table>
Perform System Access Reviews
2019-020
VDH

Responsible Contact Person(s): Diana Jordan - Director of Disease Prevention, Paula Garrett - Director of Community Nutrition, Stacey Ferrer - Director of Financial Management

Corrective Action Planned: During the review period, three data systems have been in use to support the Ryan White (RW) related activities: E2Virginia recorded client level data for services other than the AIDS Drug Assistance Program (ADAP). User reviews for this system were conducted by email on a quarterly basis. The Division of Disease Prevention (DDP) Redcap RW module replaced E2Virginia. The DDP Redcap users are reviewed monthly on a rolling basis that is determined by the date the respective user was given access. The ADAP Database records client level data for individuals receiving medication, premium and co-payment assistance. The ADAP data manager did not complete all reviews. She was assigned to immediately perform and document a user access review. This was completed. Job descriptions for EP245, her supervisor (EP236), and the unit manager responsible for the Ryan White Program (EP237) were revised to clearly document that users reviews must be completed at least quarterly and signed by these positions by November 26, 2019. The next quarterly use review required prompting by the Division Director in order for EP245, EP236, and EP237 to complete. The Division Director will monitor until staff have completed 3 successive quarterly reviews without prompting. Until September 2019, the Business Analyst was sending out Crossroads User Access reports to all 35 Health districts individually and the coordinators responded if the report is correct or any changes needs to be made or any user must be deactivated from their Health District and changes were made based on their response accordingly. Since October 2019 there's a new process in place on how Crossroads access must be provided for each LA staff from the Health District. Each users role was reviewed to ensure they had the appropriate access based on their position. New access is provided for each staff member based on their roles and responsibilities once appropriate training is completed. This process is managed by the Nutrition Education Liaison. Currently, the Business Analyst generates one consolidated Local Agency User access report on a monthly basis and uploads them on our internal website. An email is sent to all 35 Health Districts Coordinators to have them review their Health District report and lets the Business Analyst know of any changes or any staff member's access deactivation. Responses are only needed if they find an error or need any changes/corrections. OFM will evaluate the current practice and implement the necessary procedures to ensure that all reviews are done in a timely manner with the appropriate level of review and sign-off.

Estimated Completion Date: 10/24/2020

Improve Segregation of Duties Controls over the Payroll and Human Resources System
2019-021
UVA

Responsible Contact Person(s): Augie Maurelli, AVP for Financial Operations

Corrective Action Planned: As noted, the University has proactively engaged an external consultant for a post-implementation review of segregation of duties associated with our HCM implementation. UVA Finance, ITS, HR, and Internal Audit have begun to evaluate and address the recommendations received in the report and will continue to do so through FY2020. UVA Finance will take the lead in addressing segregation of duties conflicts and creating an ongoing process in accordance with FIN-021 and ISO 27002, for evaluating, granting, and monitoring future access to the system, as well as resolving conflicts.

Estimated Completion Date: 6/30/2020

Improve Process for Terminating Access to the Commonwealth's Retirement Benefits System
2019-022
UVA

Responsible Contact Person(s): David King, Senior HR Specialist for Benefits

Corrective Action Planned: The University is developing an internal protocol with managers of the respective teams across Human Resources and Payroll to ensure the security administrator is notified in writing of a termination of anyone with current access to the system. Furthermore, the University will check the access list regularly and compare against active termination records to ensure that access is terminated timely.

Estimated Completion Date: 1/1/2020

Improve Patient Accounting, Billing, and Management System Segregation of Duties
2019-023
UVAH

Responsible Contact Person(s): Mark Pulcinski

Corrective Action Planned: The Medical Center continues to implement the processes in order to demonstrate appropriate segregation of duties within the Patient Billing system, therefore strengthening internal controls within the Medical Center, while minimizing risk.

Estimated Completion Date: 6/30/2020
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<tr>
<td>Remove Separated Employee Access in a Timely Manner 2019-024 DMAS</td>
<td>Corrective Action Planned: In January 2019, DMAS implemented a K-2 Workflow to ensure all divisions receive uniform notification and acknowledge when they completed the assigned tasks. This gives more visibility to the process. In December 2019, the CISO Office of Compliance and Security (OCS) notified all agency supervisors of the gaps arising out of delayed notification. OCS will continue to work with HR on improving the K2 Workflow process to ensure supervisors and managers are properly following the exit clearance process. HR has been monitoring the system to ensure all separated employees have been entered into the system. HR includes this process in the quarterly HR Compliance and Process Training for DMAS Managers. OCS reviewed its process and identified a control gap. OCS changed the process to ensure system access is removed before signing off in the K-2 workflow that the task was completed. Access is removed on the last day of work which meets or exceeds the Security Standard. OCS Updated its policy to accurately state that access must be removed within 24 hours after separation. Estimated Completion Date: 3/31/2020</td>
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<td>Continue to Improve Controls Over Role Access 2019-025 TAX</td>
<td>Responsible Contact Person(s): Patricia Higgins - Assistant Commissioner, Vengatesh Agaram - Assistant Commissioner Corrective Action Planned: Phase I (Jan-March 2020): Assemble a leadership workgroup to review circumstances surrounding the 14 of 35 roles accessed which provided excess authority of employee job duties. Goal is to identify communication, technology and operational breakdowns and opportunities for strengthening controls. Phase II (April-May 2020): Prioritize specific steps and initiatives to further strengthen controls, reduce unnecessary critical access, and ensure least privilege is maintained. These efforts may include technology enhancements, training and educational opportunities, policy and procedure changes, ongoing monitoring and review of roles, and memorialized documentation. Phase III (June-August 2020): Implementation of enhancements to include; communications, training and education, systems changes, and post recertification quality review. Estimated Completion Date: 8/30/2020</td>
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<tr>
<td>Continue to Improve Information System Access Controls 2019-026 TD</td>
<td>Responsible Contact Person(s): Vicki Bridgeman, Director of Unclaimed Property Deborah Edwards, Information Security Officer Corrective Action Planned: Treasury will continue to improve policies and procedures to include a timely review of its detective controls. Additionally, Treasury will continue to utilize least privilege and separation of duties when assigning access to systems. Estimated Completion Date: 6/30/2020</td>
<td>No</td>
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<td>Improve Access Controls to Critical Systems 2019-027 DSS</td>
<td>Responsible Contact Person(s): Barry Davis - Director of Information Security and Risk Management Stephanie Larson - Director, Organizational Development Corrective Action Planned: DSS does not have sufficient policies and procedures in place to ensure access is granted based on least privilege, access is removed timely, includes accurate conflicting access roles and periodic reviews of access are completed. ISRM has met with Organizational Development to develop a process to notify ISRM when an employee's employment status is changing (i.e., termination or transfer). This will help ISRM ensure that access is removed when an employee leaves DSS or moves to a position that no longer requires a given system access. ISRM will use exception reports in SAMS (e.g., LDAP to Personnel Data Mismatch, Possible Employee Transfer) to identify users that may have separated or transferred, and will remove the users' systems access. ISRM has updated the documented standard operating procedure (SOP) for terminating systems access. The SOP now identifies the system access that is not managed in SAMS (e.g., EPPIC ECC) and the corresponding State employee user groups (e.g., the Division of Child Care &amp; Early Childhood Development, Young Williams). This will help ISRM ensure access is removed for EPPIC ECC when a user separates from DSS. ISRM will perform annual access reviews for EPPIC ECC to ensure that a) user accounts belong to current DSS employees with a valid business need for access; and b) a user has only the least amount of access required to perform assigned job functions. Further, Organizational Development will update the separation and transfer checklist to include Cardinal access removal, as well as any other systems not controlled by the central authentication system. Estimated Completion Date: 9/1/2020</td>
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<td>Continue Improving Controls for Processing Access Terminations and Changes 2019-028 DMV</td>
<td>Corrective Action Planned: The Department of Motor Vehicles understands the need for timely account disablement for separating employees and has made significant progress on our internal controls. In the evaluation of the controls supporting this process we considered all technical controls and those requiring human interaction.</td>
<td>Beau Hurley - Chief IT Security &amp; Agency Risk Management</td>
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<td>Perform Annual Access Review of Information Systems 2019-029 DOC/CA</td>
<td>Corrective Action Planned: The Department of Corrections established an annual control process for reviewing users' access. At the end of the performance year, supervisors were required to review their employees' &quot;Employee Work Profile&quot;. During this annual process, supervisors reviewed and updated the Computer Application Access Checklist to ensure that accesses were modified as needed. The Office of Human Resources at Headquarters strengthened the operational controls of our systems by implementing an annual validation cross check of user access to our Attendance/Leave and Human Resource (HR) systems. These additional measures have been included in the aforementioned procedure. This internal procedure was provided to all applicable personnel, discussed in monthly HR staff meetings, documented in the monthly HR newsletter, and electronically housed in a shared access platform by June 30, 2019. Our remaining time and attendance system will not require additional cross check verification, as it is linked to the HR system. When employees are removed from the HR system, their access to the time and attendance system is automatically removed. Therefore, when HR cross checks the HR system, the time and attendance system will also be cross checked and reviewed.</td>
<td>Lucinda Childs-White / Human Resources Director</td>
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<td>Improve Logical Access Controls for Users with Privileged Access 2019-030 ABC</td>
<td>Corrective Action Planned: ABC will update account management of users with privileged access. Additionally, there is a concerted effort to adopt and implement the security standards now that the appropriate policies have been implemented. Virginia ABC will update our progress, on a quarterly basis, with the Virginia Department of Accounts (DOA).</td>
<td>Paul Williams, CIO</td>
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<td>Improve Database Security 2019-031 VDOT</td>
<td>Corrective Action Planned: The APA identified that a database security control for a sensitive system's database did not meet the security standard. VDOT had addressed that control by assigning an independent database administrator from the VDOT Central Office Information Technology Division to independently review the log files generated by the project team members. Based on the APA's feedback, VDOT have modified our log file review process to change the independent reviewers to the Division Head and Designee who are the application business owners. The new process automatically generates audit log files daily and emails the files to the business owner and designee. ITD will conduct training on reviewing the audit logs and has developed a procedure that provides guidance on how to review and identify anomalies. Upon completion of the business owner review, the log files are stored on the VDOT file server and retained for 12 months.</td>
<td>David Caudill - Division Administrator for Tolling Division Theresa Hadden - Division Administrator for Information Technology</td>
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<tr>
<td>Implement Process for Ongoing Monitoring of System Access 2019-032 DOE/COO</td>
<td>Corrective Action Planned: Management is aware of the importance of removing temporary system access following the completion of tasks. In addition, management has begun development of formal policies and procedures for periodic monitoring of existing user access to ensure that accurate access and rights are maintained for systems in our School Nutrition Programs. Management would like to note that the system access in this case did not affect school divisions' previous approvals for participation in particular school nutrition programs, nor the reimbursement rates for the programs in which they were approved to participate.</td>
<td>Sandra Curwood - Director of School Nutrition</td>
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| Improve Web Application Security 2019-033 | Responsible Contact Person(s): Pam Tauer - CTO  
Corrective Action Planned: Ticket RITM0189384 opened on January 23, 2020 requesting the security configuration setting be reviewed and modified by Service Provider to align with the Commonwealth’s SEC501 Security Standard.  
Estimated Completion Date: 3/6/2020 | No |
| DOA | | |
| Improve the Budget System Database Governance and Security 2019-034 | Responsible Contact Person(s): Michelle Vucci - Associate Director for Administrative Services  
Corrective Action Planned: DPB has worked with its external vendor to convert its staff augmentation contract to a defined statement of work agreement that clearly delineates base level operations and maintenance support, which includes optional support to address activities that may fall outside the baseline operations agreement. This statement of work has finalized and is moving through the procurement process.  
Estimated Completion Date: 4/30/2020 | No |
| DPB | | |
| Improve Web Application Security 2019-035 | Responsible Contact Person(s): Robert Hobbelman - CIO, Don Tyson - IT Manager  
Corrective Action Planned: DBHDS plans to have the administrator cross train other IT developers to support the system as secondary and tertiary resource for backup administrator support. The application is in the process of moving to a cloud based platform. DBHDS is currently updating the risk assessment to ensure sufficient mitigating controls are in place. The administrator has been moved, Daily, Weekly, Monthly and Yearly tasks documentation has been requested and will be used to create a reference document for cross training additional DBHDS staff.  
Estimated Completion Date: 7/1/2020 | No |
| DBHDS | | |
| Improve Access Controls over the Internal Accounting and Patient Revenue Systems 2019-036 | Responsible Contact Person(s): Robert Hobbelman - CIO, Don Tyson - IT Manager  
Corrective Action Planned: DBHDS will improve access controls. This will include continuing to conduct security monitoring activities at all regions and facilities and ensuring they are sufficiently documented.  
Estimated Completion Date: 8/1/2020 | No |
| DBHDS | | |
| Improve Web Application Security 2019-037 | Responsible Contact Person(s): Roland Rivera - Deputy Commissioner Technology  
Barry Davis - Director of Information Security and Risk Management  
Corrective Action Planned: DSS does not configure a sensitive web application in accordance with the Security Standard. Social Services should develop a plan to implement the controls discussed in the communication marked FOIAE in accordance with the Security Standard in a timely manner. Doing this will help to ensure Social Services secures the web application to protect its sensitive and mission critical data. The Division of Enterprise Systems will dedicate resources to remediate security patch issues, scan vulnerabilities, continuous monitoring and logging, header sanitization, and encryption.  
Estimated Completion Date: 9/1/2020 | No |
| DSS | | |
| Improve IT Change and Configuration Management Process 2019-038 | Responsible Contact Person(s): Roland Rivera - Deputy Commissioner Technology  
Corrective Action Planned: DSS does not follow an IT change and configuration management process that includes all elements required by the Security Standard. Change management is a key control to evaluate, approve, and verify configuration changes to security components. Social Services should develop a plan to implement the controls discussed in the communication marked FOIAE in accordance with the Security Standard in a timely manner. DIS and ISRM will dedicate resources to monitor activity of privileged users authorized to make changes to production environments.  
Estimated Completion Date: 9/1/2020 | No |
<p>| DSS | | |</p>
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| Improve Web Application Security      | 2019-039         | Responsible Contact Person(s): Suresh Soundararajan - Chief Information Officer, Stephanie Williams-Haynes - Information Security Officer  
Corrective Action Planned: CrossRoads application is subject to releases as scheduled by the CrossRoads’s states’ user group. The technology upgrade will allow the state to switch. This technology upgrade is currently planned for release 2.5 which the user group has scheduled for EARLY 2021. A finalized schedule for release 2.5 is due to the user group in LATE 2020. DXC (software vendor) notified in July 2019 of vulnerabilities identified in Quarterly VITA scan. The current status of this ticket is “XR Approved for Release Management; CR or Ticket is fully approved and ready assignment to a release”. Health will perform an additional, more detailed, scan in QA environment during April 2020. Following this scan, VDH will open additional tickets with DXC for each URL scanned.  
March 2020 - Update : VDH is currently working to procure a sole source contract with DXC LLC to cloud host the Application and enhance and maintain the application. The new contract is expected to be signed by March 31, 2020. The vendor has worked with VITA and obtained ECOS approval. VDH and the vendor sanitized the header information for the web application September 23, 2019. Office of Information Management developed a change management procedure and process to include system impact analysis and supporting documentation on all Health’s IT systems. Director of Information is coordinating with Office of Information to incorporate. The baseline configuration was reviewed and updated on September 10, 2019 and will be reviewed on an annual basis or as changes to architecture occur. VDH is now receiving backup emails from VITA.  
Estimated Completion Date: 6/1/2021 | No                  |
| Improve Server Operating System Security | 2019-040         | Responsible Contact Person(s): David Harris - IT Operations Manager, Paul Battle - Information Security Manager  
Corrective Action Planned: CIS Benchmarks have been applied to the Financial Management System and documentation has been prepared to explain any deviations.  
Estimated Completion Date: 6/26/2019 | No                  |
| Improve Vulnerability Remediation Efforts | 2019-041         | Responsible Contact Person(s): Tim Tillman - CISO  
Corrective Action Planned: Management recognizes the concerns outlined in the report. DOE will continue to work with the Partnership (i.e., Virginia Information Technologies Agency) to ensure that installation of current security patches and other updates for its IT systems and workstations are conducted. DOE will also monitor additional resources that may be provided by the Partnership in support of improving this area.  
Estimated Completion Date: 6/30/2020 | No                  |
| Improve Web Application Security      | 2019-042         | Responsible Contact Person(s): Tim Tillman - CISO  
Corrective Action Planned: Management would like to note that this finding was corrected during the course of the audit. Management will ensure that this information remains in the corrected status for future reviews and audits.  
Estimated Completion Date: 12/31/2019 | No                  |
| Improve Database Security             | 2019-043         | Responsible Contact Person(s): Paul Williams, CIO  
Corrective Action Planned: ABC will adopt the appropriate benchmark in order to align with industry best practice and implement the controls and configurations within our capability. For any that remain, Virginia ABC will document our business needs, explore mitigating, compensating controls, and will pursue security exceptions as may be necessary. Virginia ABC will update our progress, on a quarterly basis, with the Virginia Department of Accounts (DOA).  
Estimated Completion Date: 12/31/2020 | No                  |
| Improve Database Security             | 2019-044         | Responsible Contact Person(s): David Portner, Information Technology Director  
Corrective Action Planned: Due to the FOIA exempt nature of this finding, the detailed planned corrective actions have not been included. The VEC is taking corrective actions to address the weaknesses; one of the weaknesses has been completed and work is continuing to remediate the remaining four weaknesses.  
Estimated Completion Date: 6/30/2020 | No                  |
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| Improve IT Contingency Management Program 2019-045 DBHDS | Responsible Contact Person(s): Robert Hobbelman - CIO  
Corrective Action Planned: DBHDS is changing the infrastructure to a more cloud based architecture which will provide greater availability of resources. This change is based on approved cloud based funding. Continuity of Operations Plans and Disaster Recovery Plans are changing to support the new infrastructure.  
Estimated Completion Date: 6/30/2020 | No |
| Improve Disaster Recovery for Sensitive Systems 2019-046 DBHDS | Responsible Contact Person(s): Robert Hobbelman - CIO  
Corrective Action Planned: DBHDS will submit a Request for Service (RFS) to SAIC to request a cost estimate to subscribe to the tier 1 support model for all its infrastructure. The previous quoted costs prohibited the ability to financially support the need.  
Estimated Completion Date: 6/30/2020 | No |
| Improve Contingency Management Program 2019-047 VDH | Responsible Contact Person(s): Suresh Soundararajan - Chief Information Officer, Stephanie Williams-Haynes - Information Security Officer  
Corrective Action Planned: Office of Information Management will continue to work with VDH senior leadership on the agency's Continuity Program. VDH ISOs have successfully completed the Business Impact Analysis (BIA) for 2019 to include a list of primary business functions with management approvals on the BIAs. VDH leadership also established an IT systems prioritization group to identify mission essential functions, identified the tier levels for disaster recovery services, and IT systems prioritization. The Office of Emergency Preparedness (OEP) and the Office of Information Management (OIM) have scheduled an Agency COOP test and exercise to include IT systems in March 2020. Agency-wide COOP test will be planned.  
Estimated Completion Date: 3/31/2020 | No |
| Improve the Disaster Recovery Plan 2019-048 VDH | Responsible Contact Person(s): Suresh Soundararajan - Chief Information Officer, Stephanie Williams-Haynes - Information Security Officer  
Corrective Action Planned: Agency Head has signed off on the 11 IT sensitive systems and tier 4 disaster recovery services for these system.  
Estimated Completion Date: 6/1/2020 | No |
| Develop Records Retention Requirements and Processes for Case Management System 2019-049 DSS | Responsible Contact Person(s): Deborah Vaughn - Enterprise Systems  
Corrective Action Planned: Social Services did not make progress to develop and implement electronic records retention requirements for its case management system. Federal regulations require different record retention requirements for different federal programs. Additionally, the Virginia Public Records Act (§ 42.1-91 of the Code of Virginia) requires each agency to be responsible for ensuring that its public records are preserved, maintained, and accessible throughout their lifecycle, including converting and migrating electronic records as often as necessary so that information is not lost due to hardware, software, or media obsolescence or deterioration. The Virginia Department of Social Services, Division of Enterprise Systems has Change Request CR435: Records Purge and Retention tentatively on the schedule for November 2020 release and deployment. The business cites tentative due to IT leadership changes and the fact that agency priorities may cause adjustment to any and all scheduled changes.  
Estimated Completion Date: 11/30/2020 | No |
| Continue to Improve Disaster Recovery Planning Documentation 2019-050 TAX | Responsible Contact Person(s): Ed Cooper - Deputy CTO  
Corrective Action Planned: Tax is working to update the Contingency Plan (CP) and Disaster Recovery Plan (DRP) to reflect Business Impact Analysis (BIA) business requirements. Due to delayed responses from VITA regarding the Disaster Recovery contract offerings to include definition of Recovery Time Objectives (RTO), the project completion date will be impacted.  
Estimated Completion Date: 8/30/2020 | No |
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<td>Complete and Approve the System Security Plan</td>
<td>William Burnette - Information Security Officer, Office of Compliance and Security Mike Jones - Acting Chief Information Officer, Information Management Division</td>
<td>DMAS OCS reviewed the latest update received from Conduent in January 2020 and communicated the major gaps in February 2020. OCS has approved 147 out of 450 controls but many are still not at a maturity level that OCS expects for a compliant system. Over the next quarter, DMAS OCS (Don Danielson) will work with Conduent through direct weekly meetings with the SMEs at Conduent to review individual controls. DMAS OCS will validate the documentation that supports the controls. The next check point for phase 1 will be March 31, 2020 with a goal of over 200 controls approved. DMAS OCS will approve the SSP after it thoroughly reviews the documentation and ensures that the SSP meets the COV Information Security Standards (SEC501-11.1 PL-2 – System Security Plan). OCS will set deadlines for Conduent with the overall completion date to be June 30, 2020, and will work with the DMAS Contract Monitor for Conduent to prioritize this requirement.</td>
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<td>Develop a Process to Maintain Oversight for Third-Party Providers</td>
<td>Roland Rivera - Deputy Commissioner Technology Barry Davis - Director of Information Security and Risk Management</td>
<td>DSS does not have a formal process to manage its third-party Software as a Service (SaaS) providers that fall under the Virginia Information Technologies Agency's (VITA) Enterprise Cloud Oversight Service (ECOS). Social Services uses VITA’s ECOS to assist the agency with gaining assurance that its SaaS providers implement the minimum security requirements required by the Commonwealth’s Hosted Environment Information Security Standard, SEC525 (Hosted Environment Security Standard). The Virginia Department of Social Services (DSS), Department of Information Systems (DIS), Department of Information Security and Risk Management (ISRM), and Department of General Services (DGS) will dedicate resources to developing a formal policy, procedure, and process to review and maintain VITA ECOS documentation. Procedures will detail a process to monitor and maintain the VITA ECOS oversight program of third-party SaaS providers. DSS will develop procedures to address inadequate security controls identified in VITA ECOS documentation. ISRM will coordinate with DGS to develop a policy that ensures security compliance is enforced as part of the vendor’s contractual obligations.</td>
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<tr>
<td>Create Processes for Review and Assessment of Third-Party Service Provider’s Controls</td>
<td>Dan Hinderliter - Director of Procurement and Administrative Services</td>
<td>DBHDS has already implemented update requirement language and boilerplate documents to address future contracts.</td>
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<td>Practice Oversight of Service Providers Throughout the Lifecycle of a Project</td>
<td>Beau Hurley - Chief IT Security &amp; Agency Risk Management</td>
<td>DMV will include a higher degree of oversight from the moment the vendor has the ability to present risk to the agency and work with the Commonwealth CISO on possible changes that we could make to Commonwealth Security Standards to establish more concrete requirements on what needs to be reviewed as part of vendor oversight.</td>
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<td>Improve Security Awareness Training Program</td>
<td>Jason C. Belford, Chief Information Security Officer</td>
<td>As part of its risk-based approach to information security, the University will revise its policies, standards, and guidelines concerning general security awareness training to align more closely with ISO 27002. The University will update its requirements to “recommend” general security training for all employees and will continue to encourage all employees to successfully complete the general security training. Employees accessing Highly Sensitive Data (HSD) will continue to be required to complete security awareness training.</td>
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<td>Improve Security Awareness Training Program 2019-056 ABC</td>
<td>Responsible Contact Person(s): Paul Williams, CIO ABC will require users to take annual security awareness training within a set time of assignment and will produce monthly tracking reports communicated to directors throughout the organization and quarterly reports to the Virginia ABC Board. All users who have not completed training after the set period of time will have their accounts disabled until the training is complete. Virginia ABC will also establish a program for new hires to take training as an integrated part of the current new employee orientation. Virginia ABC will also conduct role-based security training for all appropriate employees. Virginia ABC will update our progress, on a quarterly basis, with the Virginia Department of Accounts (DOA). Estimated Completion Date: 12/31/2020</td>
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<td>Improve Web Application Security Controls 2019-057 DHRM</td>
<td>Responsible Contact Person(s): Bradley Paul - DHRM IT Systems Architect Maurice Coles - DHRM InfoSec Security Analyst Corrective Action Planned: DHRM Information Technology Systems Operations staff is working with VITA/SAIC partnership to review and replace the depreciated encryption protocols and to review the web server headers, assuring the sanitization is done and implemented by the partnership; DHRM Information Security staff is monitoring the progress. Estimated Completion Date: 6/30/2020</td>
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<td>Improve Web Application Security 2019-058 TD</td>
<td>Responsible Contact Person(s): Deborah Edwards - Information Security Officer Corrective Action Planned: Treasury will develop a plan to address the control discussed in the communication marked FOIAE in accordance with the Security Standard in a timely manner. Estimated Completion Date: 6/30/2020</td>
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<td>Continue Improving Database Security 2019-059 DSS</td>
<td>Responsible Contact Person(s): Roland Rivera - Deputy Commissioner Technology Barry Davis - Director of Information Security and Risk Management Corrective Action Planned: DSS continues to not perform certain security procedures over the databases supporting its financial reporting system and case management system in accordance with the Security Standard and industry best practices. We communicated the weaknesses for both systems to management in a separate document marked Freedom of Information Act Exempt (FOIAE) under § 2.2-3705.2 of the Code of Virginia due to its sensitivity and description of security controls. The Virginia Department of Social Services, Department of Information Systems and Department of Information Security and Risk Management are dedicating resources to implementing audit logging and monitoring over the databases. Estimated Completion Date: 9/1/2020</td>
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<td>Continue Improving Database Security 2019-060 DOE/COO</td>
<td>Responsible Contact Person(s): Tim Tillman - CISO Corrective Action Planned: Management is aware of the importance of meeting the requirement in the Commonwealth Security Standard to ensure confidentiality, integrity and availability of data within the database or the information it reports. DOE has made significant improvements in database security since the 2018 audit. DOE continues to work with the Partnership and due to the lack of responsiveness is in the process of pursuing alternative software through a 3rd party to report this information in order to achieve compliance with the Security Standard. Estimated Completion Date: 6/30/2020</td>
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<td>Dedicate Resources to Support Information Security Program 2019-061 DBHDS</td>
<td>Responsible Contact Person(s): Robert Hobbelman - CIO Corrective Action Planned: DBHDS IT has conducted a review of current applications and certified approximately 133 sensitive systems. DBHDS management will analyze staff requirements to maintain current applications and implement information security controls efficiently. Based on the analysis result, staffing will be increased to necessary levels to meet the audit finding objectives. Estimated Completion Date: 2/18/2021</td>
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<tr>
<td>Develop Baseline Configurations for Information Systems</td>
<td>2019-062 DBHDS</td>
<td>Corrective Action Planned: DBHDS is will be resubmitting to SAIC a request to receive all the base configurations from the infrastructure side.</td>
<td>No</td>
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<tr>
<td>Continue Improving IT Risk Management Program</td>
<td>2019-063 DSS</td>
<td>Corrective Action Planned: DSS does not have documentation supporting the IT System and Data Sensitivity Classifications for one system (2.5%) out of a total of 40 sensitive systems. The Security Standard, section 4, requires Social Services classify the IT system as sensitive if any type of data handled by the system is sensitive based on confidentiality, integrity, or availability. The Department of Social Services, Information Security and Risk Management Division is in the process of reviewing candidates for the unfilled Risk Manager position. The Risk Manager’s job duties will include updating data classification for sensitive systems, conducting and updating risk assessments, conducting and updating system security plans, and developing corrective action plans for outstanding risks. Estimated Completion Date: 9/1/2020</td>
<td>No</td>
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<tr>
<td>Mitigate Server Vulnerabilities</td>
<td>2019-064 TAX</td>
<td>Corrective Action Planned: TAX leadership formally communicates the status of this issue with VITA executive management each quarter.</td>
<td>No</td>
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<td>Complete a Risk Assessment for Each Sensitive System</td>
<td>2019-065 TAX</td>
<td>Corrective Action Planned: Virginia Tax will implement a risk assessment plan that will assess and report risks of sensitive systems as required by SEC 501.</td>
<td>No</td>
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<td>Improve IT Asset Surplus Process</td>
<td>2019-066 VCU</td>
<td>Corrective Action Planned: VCU utilizes a three tiered policy framework to govern its operations related to information technology and information management that includes top level policies, middle tier technology standards, and the technical operational baselines. As such, the Media Sanitization Baseline is a set of technical operational procedures that is governed by the Computer and Network Resource Use Policy and Information Security Policy, enforced through the Data Handling and Storage standards. The aforementioned standard is up for its triennial update and VCU will modify the standard to provide additional clarification on IT asset disposal. Further, VCU will review and update as necessary, its media sanitization baseline to include additional guidance on media sanitization and destruction. Estimated Completion Date: 6/30/2020</td>
<td>No</td>
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<tr>
<td>Comply with Employment Eligibility Requirements</td>
<td>2019-067 DBHDS</td>
<td>Corrective Action Planned: DBHDS will ensure all facility Human Resources staff are trained on employment eligibility requirements, on how to fill out the I9, and on how to use E-verify. It should be noted that training was offered to staff in December 2018. In 2020 we will continue to offer training on completing the I9 process. USCIS is offering training in March and April on the I9 - this information has been shared with field HR. Estimated Completion Date: 5/1/2020</td>
<td>No</td>
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<tr>
<td>Perform Reconciliation between the Commonwealth’s Payroll and the Accounting and Financial Reporting Systems</td>
<td>2019-068 DBHDS</td>
<td>Corrective Action Planned: This issue is one of post payroll certification. DBHDS Finance has developed a checklist that each facility will be required to complete and sign indicating that all post payroll certification functions have been performed. DBHDS Finance has quarterly CFO meetings where this issue will be raised. DBHDS Finance will provide appropriate training and assessment as necessary. Estimated Completion Date: 2/20/2020</td>
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| Improve Controls over Payroll Certifications | Responsible Contact Person(s): Andrew Diefenthaler - Chief Financial Officer, Ken Gunn - Director of Budget Execution and Financial Reporting  
Corrective Action Planned: DBHDS will address the need to adjust specific procedures in this area at our quarterly CFO meetings this year. Specific and standardized procedures across all facilities and the Central Office will be developed.  
Estimated Completion Date: 7/1/2020 | No |
| Retain Documentation of Property Collection and Removal of Terminated Employee Badge Access | Responsible Contact Person(s): Stacy Pendleton - HR Director  
Corrective Action Planned: DBHDS HR staff met with the APA to review these findings. Termination process/policy will be updated and shared with all facilities. Training will be provided and presentations will be given at the DBHDS HR Forum in April.  
Estimated Completion Date: 5/1/2020 | No |
| Ensure Terminated Employees Are Properly Classified in the Payroll System | Responsible Contact Person(s): Stacy Pendleton - HR Director  
Corrective Action Planned: Training on CAPP Manual Topic 50320 will be reviewed at the DBHDS HR Forum in April. Information will be shared with payroll staff for training.  
Estimated Completion Date: 5/1/2020 | No |
| Properly Approve and Monitor Administrative Employee Overtime | Responsible Contact Person(s): Stacy Pendleton - HR Director  
Corrective Action Planned: Training on DHRM policies regarding hours of work and OT will be reviewed at the DBHDS HR Forum.  
Estimated Completion Date: 5/1/2020 | No |
| Strengthen the Employee Off-Boarding Process | Responsible Contact Person(s): Stacey Ferrer - Director of Financial Management  
Corrective Action Planned: The Office of Information Management will work with HR on improving the internal controls around the agency's staff separation process.  
Estimated Completion Date: 6/1/2020 | No |
| Enhance the Overtime Reporting Process | Responsible Contact Person(s): Stacey Ferrer - Director of Financial Management  
Corrective Action Planned: The Office of Information Management will work with the business units on the proper way to complete the overtime form.  
Estimated Completion Date: 6/1/2020 | No |
| Develop and Implement Policy for Monitoring Part-time Employee Hours | Responsible Contact Person(s): Stacey Ferrer - Director of Financial Management  
Corrective Action Planned: The Office of Information Management will evaluate the current practice and implement the necessary procedures to ensure that part time employees’ time are monitored and does not exceed the threshold.  
Estimated Completion Date: 6/1/2020 | No |
| Improve Timesheet Approval Process | Responsible Contact Person(s): Paul Grisdale, Payroll Director  
Corrective Action Planned: The University will review the timesheet approval process and take the necessary steps to create adequate timesheet controls.  
Estimated Completion Date: 6/30/2020 | No |
| Implement Internal Controls to Terminate Benefits for Employees Convicted of a Felony | Responsible Contact Person(s): Catey Dickensheets - Director of Human Resources  
Corrective Action Planned: DMV has now put in place an internal process that will keep HR apprised of all pending court cases involving current and former employees that may result in the initiation of the VRS process. DMV management is confident that moving forward, the agency will initiate the benefits forfeiture process in a timely manner.  
Estimated Completion Date: 10/1/2019 | No |
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| **Perform and Document Commonwealth’s Retirement Benefits System Reconciliations** 2019-078 DBHDS | Responsible Contact Person(s): Stacy Pendleton - HR Director  
Corrective Action Planned: All facilities have the identical policy; however, it is not always being followed properly. DBHDS will work with its facilities to ensure all employees are trained on the procedures. DBHDS has reached out to VRS for further training and draft policy/process on the VNAV process. This will allow CO to better train and audit the facilities compliance with this requirement. DBHDS HR staff met with the APA to discuss this finding. APA gave guidance on what was missing in policy/process.  
Estimated Completion Date: 6/30/2020 | No |
| **Improve Documentation and Timeliness of Retirement Benefits System Reconciliations** 2019-079 DOC/CA | Responsible Contact Person(s): Lucinda Childs-White / Human Resources Director  
Corrective Action Planned: The Office of Human Resources within the Department of Corrections (DOC) has a systematic process for reconciling essential retirement data between the Human Resources Information System and the Virginia Retirement Benefits System. DOC’s Human Resource procedure was revised to include the appropriate process for maintaining documentation of the reconciliations between the two systems. Subsequently, the enhanced procedures for reconciliation between the human resources system and the retirement benefits system was distributed to Human Resource (HR) Officers and HR support staff at the annual conferences in the Fall of 2018. The updated procedure was also communicated to the Department’s HR community during monthly staff meetings, outlined in a monthly HR newsletter, and distributed to HR staff by mass email. As the HR Office at Headquarters has reinforced the importance of thorough and timely reconciliations with Department HR staff, these actions assisted the Payroll Department in resolving credible compensation reconciliation in a timely manner. An internal HR procedure has been drafted that addresses how to perform and document reconciliations. This procedure was finalized, approved by management, and shared with DOC staff by June 30, 2019. The Human Resources Director generated a memo to the HROs with a copy to unit heads. The purpose of this memo was to further emphasize the importance of clearing discrepancies prior to certifying the Virginia Retirement System snapshot.  
Estimated Completion Date: 6/30/2020 | No |
| **Perform Monthly Reconciliations of the Payroll and Retirement Systems** 2019-080 VDH | Responsible Contact Person(s): Stacey Ferrer - Director of Financial Management  
Corrective Action Planned: VDH has implemented the monthly review process.  
Estimated Completion Date: 1/20/2020 | No |
| **Ensure Completion of the Commonwealth’s Retirement Benefits System Reconciliation Process** 2019-081 UVA | Responsible Contact Person(s): Mary Carter - Retirement Plan Administration Associate, Erica Wheat - HR Manager Benefits Leave and Payroll, David King - Senior HR Specialist for Benefits  
Corrective Action Planned: The University implemented a new Human Resources and Payroll System during the fiscal year and the integration with the Commonwealth’s Retirement Benefits System was one of the most complex integration in its tenant. Accordingly, a significant amount of resources and testing was required to ensure a clean, production quality dataset prior to reconciliation. The University has hired a full-time dedicated resource to handle reconciliations and work is underway to catch up past due reconciliations.  
Estimated Completion Date: 6/30/2020 | No |
| **Improve Internal Controls for Reviewing Exceptions in the Commonwealth’s Retirement System** 2019-082 DMV | Responsible Contact Person(s): Catey Dickensheets - Director of Human Resources  
Corrective Action Planned: DMV has since hired a new Compensation and Benefits Manager who is currently documenting a process for reviewing and reconciling discrepancies, establishing and training a main point of contact within DMV as well as a back-up, and developing a means to retain supporting documentation. DMV continues to partner with Virginia Retirement System in order to receive automated reconciliation reports in a timely, routine manner.  
Estimated Completion Date: 6/1/2020 | No |
Audit Finding

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<td>Ensure Employees Complete Required Conflict of</td>
<td>Responsible Contact Person(s): Kathleen Guinan - Human Resources Division Director  Corrective Action Planned: The Human Resources Division (HR) includes a reference to completion of an annual Statement of Economic Interests (SOEI) on all job postings for positions of trust. HR has also added a reference on the job postings about the required Conflict of Interest Act (COI) Training. In addition, employment offer letters state that employees in positions of trust must complete a SOEI at hire and annually thereafter. Senior management has agreed that DMAS will require SOEI filers to complete the COI Training annually rather than every two years. Filers also have difficulty remembering when they last took the training. Going forward, we will require filers to take the training (once updated by the Council and the OAG) by March 30, 2020 each year. HR has also added information in employment offer letters about the COI training requirement and their responsibilities. Before new hires who will hold positions of trust start employment, HR sends an email to their personal email addresses (since no COV account yet) to inform them that they have to complete the SOEI on or before the date of employment. HR includes information in the email about the required COI training and that they will have to complete the training within the first two months of employment. HR will follow-up on all new employees designated in positions of trust to ensure they complete the required COI training within two months of hire to ensure that they complete the training. Email follow-up with employees will include copies to managers and directors so that as the APA states, employee will be held “accountable.” HR has continued to work with the Ethics Council Coordinator regarding issues with the database and managing DMAS' information on positions of trust. HR also works with the Ethics Council Coordinator to answer questions that DMAS filers may have when they are completing a SOEI. In December 2019, HR performed the annual update to the Disclosure System and verified that the DMAS employees, associated positions, and contact information was correct in the system. On January 7, 2020, HR initiated notifications from the Disclosure System for completion of the SOEI. It is an extremely manual process to track the COI training because the COI training on the Virginia Learning Center (VLC) does not interface with the Ethics Council’s Disclosure System. The systems also do not notify filers when training has not been completed. The VLC report only reflects those who took the training not those who did not take the training. The Virginia Learning Center (VLC) site was not updated is with the most up-to-date version (2020) until mid-February. HR will announce that the COI training for 2020 must be completed by March 31, 2020 and will follow-up to ensure all SOEI filers complete the training. Estimated Completion Date: 6/30/2020</td>
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<td>Interest Training</td>
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<td>2019-083 DMAS</td>
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<td>Ensure Compliance with Conflict of Interests Act</td>
<td>Responsible Contact Person(s): Stephanie Larson - Director, Organizational Development  Corrective Action Planned: Human Resources did not properly identify all employees and board members holding a position of trust, to ensure required disclosures were properly filed. DSS employees in Positions of Trust, who had not completed the training, were given the corrected instructions that the initial training should be completed within 2-months of hire. All identified employees have since completed the SOEI training. DSS Board Members were confirmed for the FY2020 cycle and will be added to the site during the enrollment FY2020 period. Estimated Completion Date: 2/28/2020</td>
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<td>2019-084 DSS</td>
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<td>Comply with the Conflicts of Interest Act</td>
<td>Responsible Contact Person(s): Jamie Porter - SBS Director  Corrective Action Planned: VDH updated the SOEI Orientation/Training notification process. VDH is also in discussion with the Office of Information Management (OIM) to explore an improved automated notification system. Estimated Completion Date: 6/20/2020</td>
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<td>2019-085 VDH</td>
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<td>Develop Policies and Procedures to Ensure</td>
<td>Responsible Contact Person(s): Tom Kim, Manager of HR Business Operations  Corrective Action Planned: The University of Virginia will make the following corrective actions: By January 10, 2020 , notify employees to complete SOEI training. By January 10, 2020, notify employees to file their SOEI. By March 31, 2020, implement a process that would require SOEI training for SOEI identified positions, and implement a process for continuous monitoring of completion. By March 31, 2020, implement a process through which new employees will file the SOEI and complete training as they are hired. Estimated Completion Date: 3/31/2020</td>
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<td>Compliance with Conflict of Interest Act Requirements</td>
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<td>2019-086 UVA</td>
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<td>Improve the Process to Identify Individuals in a Position of Trust 2019-087 VPISU/ID</td>
<td>Improve the Process to Identify Individuals in a Position of Trust 2019-087 VPISU/ID Responsible Contact Person(s): Bryan Garey - VP for Human Resources Corrective Action Planned: Assign coordinator for SOEI program (completed October 1, 2019). Complete review of all 17,506 employees, including review with COI team to include their list (complete by December 20, 2019). Update SOEI spreadsheet identifying all required positions (complete by Dec 30, 2019). Review of new hires/terms (monthly, starting in December 2019, and monthly thereafter through 2020). Add/revise required positions and initiate communication with new hires (monthly starting in December 2019 through 2020). Notify employee two times then senior management if the employee has not completed form or training completed for annual requirements. Explore the possibility of adding SOEI tag to position descriptions in Page Up (complete review by March 31, 2020 – if feasible, complete by May 1, 2020). Explore options for onboarding communication. Report those who do not complete the required training to senior management (Provost or SVP as appropriate) for further review (start in January 2020 with the annual reporting date). Estimated Completion Date: 5/1/2020</td>
<td>No</td>
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<tr>
<td>Improve Controls over the Income Verification for the TANF Program 2019-088 DSS</td>
<td>Improve Controls over the Income Verification for the TANF Program 2019-088 DSS Responsible Contact Person(s): Toni Washington - Director of Benefit Programs Corrective Action Planned: Social Services does not have adequate controls in place to ensure accurate federal reporting for two TANF performance reports, the ACF-199 &quot;TANF Data Report&quot; and ACF-209 &quot;SSP-MOE Data Report&quot;. These reports are submitted quarterly and utilize a case management system to create the reports. The Division of Benefit Programs currently has an active change request with the Division of Enterprise Systems to automate the IEVS process. The process is identified as mandatory in the policy manual, therefore there is no need to update the guidance. Additional monitoring of agency processes will be put in place until the change request implementing automation is put in place. Estimated Completion Date: 5/31/2020</td>
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<td>Improve Controls over SNAP Federal Reporting 2019-089 DSS</td>
<td>Improve Controls over SNAP Federal Reporting 2019-089 DSS Responsible Contact Person(s): Deborah Vaughn - Enterprise Systems Corrective Action Planned: Finance does not have adequate controls in place to ensure accurate federal quarterly reporting on the FNS-209 “Status of Claims Against Households” Report (FNS-209). Since the audit, Finance has worked with Information Technology to correct the VaCMS EBT Reconciliation Report to properly account for all transaction types. The beginning balance has been updated in VaCMS and the report and reconciliation process are currently working. Finance will bring discrepancies between VaCMS and Conduent to the attention of Information Technology management within 24 hours of discovery for research of the underlying information. If the discrepancy cannot be resolved, Finance will also bring this to the attention of Benefit Programs management and the CFO. Finance has also begun requiring supervisor approval of the SNAP EBT on the monthly reconciliation. DSS would be able to report their data monthly and have the capability to edit their “initial” and “interim” monthly aggregate data submittals, as well as designate when the data are available to meet the quarterly reporting requirements. Estimated Completion Date: 9/30/2020</td>
<td>No</td>
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<tr>
<td>Ensure Subrecipient Reviews Adhere to Monitoring Plan 2019-090 DSS</td>
<td>Ensure Subrecipient Reviews Adhere to Monitoring Plan 2019-090 DSS Responsible Contact Person(s): Ross McDonald - Director of Compliance Corrective Action Planned: DSS Division of Family Services (Family Services) cannot provide assurance that Adoption Assistance and Title IV-E Foster Care subrecipient monitoring reviews are completed timely and in accordance with Family Services’ Subrecipient Monitoring plan and related processes. According to DSS policy, each subrecipient is to be monitored onsite at least once every three years. The DFS is unique in that subrecipients can be any agency, nonprofit, or any other state agency awarded federal funding to administer federal programs. Mechanisms to award federal funding include grants, memorandum of agreement (MOA), and requests for application (RFA). Due to differences in funding mechanisms, subrecipients classify as local agencies or non-local agencies. However, a Subrecipient staff has been hired as of December 25, 2019 and already reviewing departmental monitoring plans and process. Subrecipient monitoring involves conducting on-site and desk reviews, the collection and analysis of critical documents, and reporting the findings by each program unit’s requirements of the review to the DFS subrecipient monitoring coordinator. Estimated Completion Date: 9/30/2020</td>
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<td>Continue to Improve Controls over Subrecipient Monitoring 2019-091 DSS</td>
<td>Responsible Contact Person(s): Ross McDonald - Director of Compliance&lt;br&gt;Corrective Action Planned: DSS continues to not provide assurance that audits are performed and reviewed for all subrecipients expending $750,000 or more and that management is making timely decisions based on the results of the audit report reviews. According to OMB Circular A-133, A pass-through entity shall monitor the activities of subrecipients as necessary to ensure that Federal awards are used for authorized purposes in compliance with laws, regulations, and the provisions of contracts or grant agreements and that performance goals are achieved. The condition in part, requires the subrecipient that expects to expend more than $750,000 in federal funds during their fiscal year to submit on-line to the Federal Audit Clearinghouse the subrecipients auditor's report. Additional, RFA’s also include a Cover Sheet in which the subrecipient identifies 1) expect to expend more than $750,000 in federal funds during their fiscal year and 2) the subrecipient fiscal year. Furthermore, DSS Subrecipient staff has meet with all the department staff responsible for monitoring with the Administrators to address controls. Also our SharePoint database where all subrecipient documents are uploaded is being review and updated to remove access to staff who don’t need to or left the agency.&lt;br&gt;Estimated Completion Date: 9/30/2020</td>
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<tr>
<td>Ensure Performance Evaluations are Completed for Professional Service Contracts 2109-092 VDOT</td>
<td>Responsible Contact Person(s): Shailendra Patel - Division Administrator of Alternative Project Delivery, Mohammad Mirshahi - Deputy Chief Engineer&lt;br&gt;Corrective Action Planned: On January 16, 2020, VDOT notified the respective contract owners of the responsibility to complete performance evaluations of contracts by the end of January and by the end of June. Each Division Administrator will certify the completion of the performance evaluations to the Alternative Project Delivery Division as specified above. Furthermore, the department is exploring the feasibility of developing automated reminders and reports through the existing contract system. With the addition of a tracking mechanism, VDOT believe that the agency will be in a better position to monitor compliance.&lt;br&gt;Estimated Completion Date: 6/30/2020</td>
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<td>Improve Controls for Ensuring Quality Improvement Recommendations are Implemented 2019-093 VDOT</td>
<td>Responsible Contact Person(s): Kerry Bates - Division Administrator for Construction Division&lt;br&gt;Corrective Action Planned: VDOT understands the importance of making sure that recommendations identified through the Construction Quality Improvement Program (CQIP) are implemented. VDOT will identify all CQIP reports that have pending follow-up activities that exceed 30 days and elevate them to the applicable District Construction Engineer and Assistant State Construction Engineer to ensure that they are completed; this will occur monthly. Further, this item will be discussed at the regularly scheduled District Construction Engineer Community of Practice meetings to ensure that CQIP follow-up activities are addressed. The Department will also look into the feasibility of employing an automated solution to ensure quality improvement recommendations are implemented in the future.&lt;br&gt;Estimated Completion Date: 6/30/2020</td>
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<td>Improve Controls over the Purchasing Process 2019-094 DBHDS</td>
<td>Corrective Action Planned: The Fiscal Director at the applicable DBHDS facility will review the relevant CAPP Manual policies and procedures for the receipt of goods and services with applicable Accounts Payable personnel and backups. Expenditure voucher samples will be pulled once a month for the period January through June 2019 to monitor compliance with CAPP Manual regulations. Expenditure audits will also be conducted during the FY 2019 ARMICS Internal Controls Review and Testwork. The Annual Procurement Symposium will feature this finding as a topic, additionally it is being addressed at Facility Fiscal Officer and Facility Director meetings. In August 2018, Fiscal and Procurement staff at the facility discovered the exception noted and &quot;self-corrected&quot; to comply with a new procurement regulation issued under Procurement Information Memoranda 98-034 dated 7/1/17. Prior to the corrective action, the facility was not compliant with Memoranda 98-034 because Fiscal Staff were not forwarding purchase orders for eVA exempt vendors for medical services and prescription drugs to Procurement personnel to enter into eVA. To ensure future compliance, Fiscal personnel will meet with Procurement personnel to review the requirements of Memoranda 98-34 and any subsequent updates. Medical Services and prescription drug expenditure samples will be pulled once a month for the period January through June 2019 to monitor compliance. Medical Services and Prescription Drug purchases will also be reviewed during the FY 2019 ARMICS Internal Controls Review and Testwork.</td>
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<td>Continue Improving the Overpayment Collection Process 2019-095 DMAS</td>
<td>Corrective Action Planned: To ensure adequate resources, the Fiscal Division management will evaluate the staffing needs of the Accounts Receivable unit to ensure that not only the critical functions are performed but also adequate controls are in place for effective compliance with state policies. Fiscal already started by filling a staff vacancy to balance the workload of the unit. Also, Fiscal initiated the hiring process for a classified Accounts Receivable Manager and has screened the applicants. Interviews have been scheduled for February 2020. To address the recommendation to &quot;evaluate its current policies, the Fiscal Division is utilizing the experience of the part time contract AR manager to review and update Accounts Receivable policies and procedures. The policies and procedures will updated by May 1, 2020. This review will include the process of establishing a dollar threshold to guide collections efforts as well as clarify policy in terms of business days or calendar days. The DMAS CFO will review and approve the implementation of the proposed updated procedures by May 15, 2020. When the Accounts Receivable Manager is hired, this effort will support implementation before June 30, 2020.</td>
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<td>Implement Separation of Duties over Accounts Receivable Resulting from Dealership Transactions 2019-096 DMV</td>
<td>Corrective Action Planned: Staff from DMV Finance will work with Dealer Services to establish the right process controls for these receivables and payments. Identification will continue to be done by the Dealer Services Work Center, but collection will occur in the Accounts Receivable Department.</td>
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<td>Improve Process for Payment of Risk Management Invoices 2019-097 TD</td>
<td>Corrective Action Planned: The Division of Risk Management (DRM) will strengthen internal controls to ensure prompt payment of invoices. These efforts include upgrading a part-time position to full-time, reallocating workload across existing resources, and emphasizing compliance with Code of Virginia §2.2-4347 and CAPP topic 21005.</td>
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<td>Improve Service Organization Control Report Review Policies and Procedures 2019-098 TD</td>
<td>Corrective Action Planned: Treasury updated its SOC Report Policies and Procedures, provided training to applicable employees, and enhanced all supplemental documents related to SOC reviews. Treasury will continue to focus on maintaining updated policies and procedures.</td>
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<td>Improve Reporting to National Student Loan Data System 2019-099 VCU</td>
<td>Responsible Contact Person(s): Valerie Clem-Brown - Associate Director of Compliance and Reporting Corrective Action Planned: To ensure that unofficial withdrawal enrollment updates are reported accurately and timely to NSLDS, the Office of Financial Aid will perform manual enrollment updates to NSLDS for all students who have withdrawn without official notification during a term/semester. This step has been added to the existing Return of Title IV procedure and will begin implementation at the conclusion of the fall 2018 term/semester. To rectify the graduation status finding, the Office of Records and Registration is sending amended enrollment files to the National Student Clearinghouse (NSC) to update the NSLDS. The office has also added a supplementary enrollment report for graduates only to the transmission schedule provided to the NSC each semester. In addition, quality control reviews will be conducted in collaboration with staff from the Offices of Financial Aid and Records and Registration at the end of each semester to ensure timely and accurate reporting at both the campus and program levels. Estimated Completion Date: 3/31/2020</td>
<td>No</td>
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<td>Improve Controls over TANF Federal Performance Reporting 2019-100 DSS</td>
<td>Responsible Contact Person(s): Deborah Vaughn - Enterprise Systems Corrective Action Planned: DSS does not have adequate controls in place to ensure accurate federal reporting for two TANF performance reports, the ACF-199 “TANF Data Report” and ACF-209 “SSP-MOE Data Report”. Findings meeting with Business Areas scheduled for January 24, 2019. Determine if VaCMS Change Request or Defect Tickets need to be developed. Based on the findings defects will be schedule in a 2019 VaCMS release. If Change Request (CR) required, documentation for CR will be developed and the CR will be scheduled for a 2019 release and implemented in 2020. Estimated Completion Date: 9/30/2020</td>
<td>No</td>
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<tr>
<td>Ensure Family Services Subrecipient Reviews Adhere to Monitoring Plan 2019-101 DSS</td>
<td>Responsible Contact Person(s): Ross McDonald - Director of Compliance Corrective Action Planned: DSS is still not adhering to its established approach for monitoring subrecipients. During fiscal year 2019, DSS did not produce quarterly reports to brief Executive Management on subrecipient monitoring activities for each Division within DSS. Division Family Services (DFS) has updated its monitoring plans for FY20 which also includes Subrecipient Monitoring Training for the department and creates a local agency risk assessment tool. DFS has a plan called the DFS Subrecipient Monitoring Plan which guides the process for meeting subrecipient monitoring requirements. The DFS Subrecipient Monitoring Plan addresses the applicable unique attributes and requirements of each program unit; the primary focus is the use of a standard monitoring risk assessment instrument, standard programmatic review instrument, compliance, internal controls, sampling methodology, applicable Office of Management and Budget (OMB) Circulars and state guidance. The DFS Subrecipient Monitoring Plan should overall have only minor revisions from one state fiscal year to another. Estimated Completion Date: 9/1/2020</td>
<td>No</td>
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<td>Implement Opioid Grant Sub-Recipient Monitoring 2019-102 DBHDS</td>
<td>Responsible Contact Person(s): Margaret Steele - Director of Adult Community Behavioral Health, Mike Zohab - SUD Operations Manager Corrective Action Planned: DBHDS’ Division of Community Behavioral Health has begun the process of developing standardized subrecipient monitoring procedures as well as documentation standards for these procedures for the opioid grant to ensure that CSBs are properly following all requirements. Estimated Completion Date: 7/1/2020</td>
<td>No</td>
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<td>Provide Federal Award Requirements to Subrecipients 2019-103 DBHDS</td>
<td>Responsible Contact Person(s): Margaret Steele - Director of Adult Community Behavioral Health, Mike Zohab - SUD Operations Manager Corrective Action Planned: DBHDS’ Division of Community Behavioral Health has begun the process of providing CSBs with the federal requirements attached to their federal awards. Also, DBHDS’ Division of Community Behavioral Health is in the process of developing standards to guide subrecipient monitoring over federal award to ensure that DBHDS will be able to properly monitor whether the CSB complies with federal regulations set forth in the contract. Estimated Completion Date: 7/1/2020</td>
<td>No</td>
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<td>Audit Finding Reference Number</td>
<td>Planned Corrective Action</td>
<td>Did Text contain a chart or table?</td>
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| Improve the Case Management System Access Review Process 2019-104 DARS | Responsible Contact Person(s): Dale Batten - Division of Rehabilitation Services Director, Rick Mitchell - Deputy Commissioner for Services  
Corrective Action Planned: The Directors of Vocational Rehabilitation in coordination with the Information Systems staff will ensure that annual performs reviews will be documented within spreadsheet of users, update ISAA forms and make required changes in the case management system and ensure reviews are filed in appropriate location.  
Estimated Completion Date: 12/31/2020 | No |
| Improve the Eligibility Determination Process for Vocational Rehabilitation 2019-105 DARS | Responsible Contact Person(s): Dale Batten - Division of Rehabilitation Services Director  
Corrective Action Planned: The Division of Rehabilitative Services Director has implemented revised procedures and system reporting to identify clients that are within 30 days of eligibility so that those cases are expedited by staff and management.  
Estimated Completion Date: 9/30/2020 | No |
| Improve Processes to Comply with the Conflicts of Interest Act 2019-106 DARS | Responsible Contact Person(s): Wallica Gaines - Deputy Commissioner for Administration and Executive Assistant to the Commissioner of DARS  
Corrective Action Planned: The agencies will maintain a list of positions of trust and individuals that are required to complete the Statement of Economic Interest and develop training schedule for existing employees. New hires will complete training within two months after hire date. All individuals in positions of trust will complete the training every two years in accordance with the Code of Virginia.  
Estimated Completion Date: 12/31/2020 | No |
| Improve Documentation to Show Compliance 2019-107 DARS | Responsible Contact Person(s): Leon Scales - DDS Director, John Thaniel - Chief Financial Officer and Chief Information Officer  
Corrective Action Planned: The DDS Director and CFO will provide additional training and communication with the appropriate staff to ensure the documentation is maintained and properly recorded and retained.  
Estimated Completion Date: 12/31/2020 | No |
| Improve Oversight of Third-Party Service Providers 2019-108 DARS | Responsible Contact Person(s): Ned Campbell - Acting DSA Information Security Officer and Chief Information Officer  
Corrective Action Planned: The ISO and CIO will require that SOC reports are submitted annually from 3rd party contractors at annual renewal.  
Estimated Completion Date: 12/31/2020 | No |