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Mary G. Morris  
Chief Executive Officer  
Direct: 804-786-0832

November 25, 2019

Hal E. Greer, Director  
Joint Legislative Audit and Review Commission  
919 East Main Street  
SunTrust Building, Suite 2100  
Richmond, Virginia 23219

Dear Mr. Greer,

It is our pleasure to present the Annual Report (the Report) of the Virginia College Savings Plan (VA529) for the fiscal year ended June 30, 2019, as required by Section 30-332 (A) and (B) of the Code of Virginia.

## **REPORT CONTENTS**

The Report contains the following:

- Transmittal Letter
- Attachment A – Audited Financial Statements for the year ended June 30, 2019
- Attachment B - Actuarial Valuation Report for the Prepaid529 Program for the year ended June 30, 2019
- Attachment C – Asset Allocation and Performance of the Prepaid529 Program for the fiscal year ended June 30, 2019
- Attachment D – Asset Allocation and Performance of the Invest529 Program for the fiscal year ended June 30, 2019
- Attachment E - Investment Policies and Guidelines for the Prepaid529, Invest529 and ABLEnow Programs

## **OVERVIEW**

VA529 is a body politic and corporate and independent agency of the Commonwealth of Virginia, created in 1994 by the Virginia General Assembly in Chapter 7, Subtitle II, Title 23.1 of the Code of Virginia, as amended (§23.1-700 through §23.1-713). VA529 does not receive general fund appropriations; however, VA529's enabling legislation provides that a sum sufficient appropriation be included by the Governor in his budget to cover current obligations of VA529, including Prepaid529's contractual obligations, in the event of a funding shortfall.

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VA529's primary mission is twofold: first to assist families and others in achieving their higher education goals through three college savings programs, Prepaid529<sup>SM</sup> (Prepaid529), Invest529<sup>SM</sup> (Invest529) and CollegeAmerica®, and our early commitment scholarship program, SOAR Virginia®, as part of our statutory mandate to help make college more affordable and accessible; and second, to assist individuals with disabilities to save for qualified disability expenses without losing certain federal means-tested benefits through ABLEnow® and ABLEAmerica®, both ABLE disability savings programs. Note that Prepaid529 is now closed to new participants.

Information on VA529's 2019 program and fiscal highlights, account growth, and program changes may be found in the 2019 Audited Financial Statements under the Letter of Transmittal and Management's Discussion and Analysis sections. JLARC staff also has access to all documents and meeting materials posted on a secure server maintained for our Board and Committee members and receives all documents and materials disseminated during meetings, including items included in this Report. Finally, JLARC staff has full access to VA529 staff.

### **SPECIFIC REPORT CRITERIA PURSUANT TO § 30-332 (A) AND (B)**

#### **(i) Planned or Actual Material Changes in Asset Allocation**

VA529 made no changes in the Prepaid529 asset allocation categories in fiscal 2019.

During fiscal year 2019, VA529 added the Invest529 Global Equity Portfolio to the actively-managed portfolio offerings. In its effort to manage excess liquidity and enhance earnings, VA529 purchased staggered Nonnegotiable Certificates of Deposit (CD) products as underlying investments for the Invest529 FDIC-Insured Portfolio. VA529 regularly reviews Invest529's static investment options as well as the age-based portfolio allocations and may consider additional changes as a result of future reviews.

As of June 30th, the CollegeAmerica program offered 43 American Funds mutual funds. During fiscal year 2019, the American Funds changed the name for two of the Portfolio Series funds. The Income Portfolio is now known as the American Funds Conservative Growth and Income Portfolio and the Balanced Portfolio is now the American Funds Moderate Growth and Income Portfolio.

A complete description of changes may be found in the 2019 Audited Financial Statements, which are included as **Attachment A**.

#### **(ii) Investment Performance of All Asset Classes and Subclasses**

VA529's Investment Advisory Committee reviews the investment performance of all VA529 programs on a quarterly basis. The complete performance and asset allocation reports are available to JLARC staff on the secure Board web site.

VA529 has assumed a long-term rate of return of 5.75 percent on Prepaid529 investments. As of June 30, 2019, the total return since inception was 6.18 percent, net of fees. Performance during fiscal year 2019 was 4.92 percent, net of fees. VA529 has adopted a long-term target asset allocation strategy for Prepaid529 as set forth in its Investment Policy and Guidelines. As of June 30, 2019, the Prepaid529 portfolio was within about 0.4 percent of its target allocation in the three major categories.

The actuarial funded status of Prepaid529 as of June 30, 2019 was 151.7%. A copy of the Actuarial Valuation Report for the Prepaid529 Program for the year ended June 30, 2019 is included as **Attachment B**.

**Attachments C and D** hereto contain detailed performance information on the Prepaid529 and Invest529 Programs as of June 30, 2019.

**(iii) Investment Policies and Programs**

VA529's Investment Advisory Committee reviews the Investment Policies and Guidelines for the Prepaid529, Invest529 and ABLEnow Programs annually. **Attachment E** hereto contains the Investment Policies and Guidelines for the Prepaid529, Invest529, and the ABLEnow Programs, most recently updated in March 2019.

**(iv) Other Information**

**Legacy Prepaid529 Program**

The Prepaid529 closed to new participants after its final enrollment period during fiscal 2019, which resulted in the purchase of approximately 3,972 contracts by customers. With a long history dating back to 1996, it has been one of the most successful programs in the country. While over time, it experienced brand name changes, contract prices increases, and program structure changes, the defined benefit remained the same. Existing Prepaid529 program customers still have the certainty that VA529 will continue to service their contracts and that Prepaid529 will cover future tuition as defined in their contracts as the normal, instate, and undergraduate full-time tuition and mandatory fees assessed to all students.

While planning for the final enrollment of Prepaid529, VA529 continued to build and seek approval for a revised prepaid program structure. This followed a Prepaid529 Sustainability Study in 2016, proposed program structure review in 2017, and a study of VA529's proposed weighted-average tuition (WAT) benefit model by the Joint Legislative Audit & Review Commission (JLARC) that was completed in November 2018. During the 2019 Session, the Virginia General Assembly approved House Bill 1972 and Senate Bill 1315, Chapters 803 and 804, respectively that provided for a new weighted-average tuition (WAT) benefit structure for contracts issued after July 1, 2019.

Planning for the new program is ongoing with a targeted launch in fiscal 2021. Integral to this project is the need to focus on program design, materials and development of internal systems, as well as technical and operational procedures. This will also include the finalization of key assumptions for valuation and pricing purposes.

In July 2018, the American Funds launched ABLEAmerica, the first ABLE plan available through financial advisors. ABLEAmerica complements ABLEnow by giving those individuals and families who utilize financial advisors another means through which to access an ABLE plan. Investments are offered through seven approved mutual funds at the ABLE-A share class level. As of June 30, 2019, the ABLEAmerica program offered six American Funds mutual funds and one American Funds Money Market Fund.

VA529 remains committed to providing the best possible customer service to our program participants and to the citizens of the Commonwealth, and to being responsible stewards of the funds in our care. VA529 is always cognizant of its mission to help make higher education more accessible and affordable to all citizens of the Commonwealth. We appreciate the opportunity to work with JLARC staff throughout the year and present this Report to the General Assembly through JLARC. We welcome any questions or comments.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mary G. Morris', with a long horizontal line extending to the right.

Mary G. Morris

#### Attachments

pc: Board of the Virginia College Savings Plan

# **Attachment A**

## **Financial Statements for the year ended June 30, 2019**



# Virginia College Savings Plan Annual Report

For the period ended on June 30, 2019

**Virginia529<sup>SM</sup>**  
**ABLEnow<sup>®</sup>**

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## LETTER OF TRANSMITTAL

November 15, 2019

Board of the Virginia College Savings Plan  
9001 Arboretum Parkway  
North Chesterfield, Virginia 23236

To the Members of the Board:

It is our pleasure to present the Annual Financial Report (the Report) of the Virginia College Savings Plan (VA529) for the fiscal year ended June 30, 2019, as required by Section 23.1-709 of the *Code of Virginia*. This Report will be presented to the Governor, the Senate Committee on Finance, the House Committees on Appropriations and Finance, and the Joint Legislative Audit and Review Commission. The Report also will be available on our web site at [Virginia529.com](http://Virginia529.com).

### MISSION AND PROGRAMS

VA529's primary mission is twofold: first to assist families and others in achieving their higher education goals through three college savings programs, Prepaid529<sup>SM</sup> (Prepaid529), Invest529<sup>SM</sup> (Invest529) and CollegeAmerica<sup>®</sup>, and our early commitment scholarship program, SOAR Virginia<sup>®</sup>, as part of our statutory mandate to help make college more affordable and accessible; and second, to assist individuals with disabilities to save for qualified disability expenses without losing certain federal means-tested benefits through ABLEnow<sup>®</sup> and ABLEAmerica<sup>®</sup>, both ABLE disability savings programs. Note that Prepaid529 is now closed to new participants.

### ACCOUNTING SYSTEM AND INTERNAL CONTROL

VA529's management assumes full responsibility for the accuracy, completeness and reliability of the information presented. The financial statements are presented in accordance with accounting principles generally accepted in the United States of America (GAAP) as established by the Governmental Accounting Standards Board (GASB). The financial statements contain a description of the accounting principles used in the preparation of the statements. In accordance with GASB principles per the *Codification of Governmental Accounting and Financial Reporting Standards*, the financial statements include Management's Discussion and Analysis (MD&A). This Letter of Transmittal is designed to complement the MD&A and should be read in conjunction with it.

VA529's management is responsible for maintaining a system of adequate internal accounting controls designed to provide reasonable assurance that transactions are executed in accordance with management's general or specific authorization, and are recorded as necessary to

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maintain accountability for assets and to permit preparation of financial statements in accordance with GAAP. The internal control system includes the organization plan, the appropriate segregation of duties and responsibilities and sound practices in the performance of duties, data security, and personnel with capabilities commensurate with their responsibilities.

#### **PREPAID529 ACTUARIAL VALUATION AND OUTLOOK**

VA529's most recent actuarial valuation report for the Prepaid529 program was prepared by Milliman, Inc. as of June 30, 2019 and compares the value of the current and projected assets of Prepaid529 to the value of the expected future disbursements and program costs. The actuarial valuation was performed based upon generally accepted actuarial principles. The two most significant assumptions used to prepare Prepaid529's actuarial valuation report are the long-term rates of investment return and future tuition growth. The report indicated an increase in Prepaid529's actuarially determined funded position from the position as of June 30, 2018 primarily due to lower than expected tuition growth and a decrease in the tuition increase assumption. We are pleased to report that Prepaid529 was 151.7 percent funded on an actuarial basis as of June 30, 2019.

VA529 continues to remain optimistic that its asset allocation and investment strategies will result in the Prepaid529 portfolio meeting or exceeding performance expectations over the long term. The Plan has an assumed long-term rate of return of 5.75 percent on Prepaid529 investments. As of June 30, 2019, the total return since inception was 6.18 percent net of fees, and reflected the lower than expected 4.92 percent overall fund performance during fiscal 2019. VA529 has adopted a long-term target asset allocation strategy for Prepaid529 as set forth within its Investment Policy and Guidelines. As of June 30, 2019, the Prepaid529 portfolio was within about 1.1 percent of its target allocation in the three major categories: Equities, Fixed Income, and Alternative Investments.

Prepaid529 performance was skewed by significant volatility within the equity and fixed income markets throughout fiscal 2019. Despite a near ten-year bull market, the market experienced volatility due to global trade tensions, major currency depreciation in emerging markets, and central bank lending rate changes. Although these instances provoked global volatility, U.S. Stocks still continued to outperform international developed and emerging market stocks. This is reflected by the index performance of the S&P 500, Dow Jones Industrial Average and the Nasdaq Composite indices which in total returned 10.4%, 12.7% and 7.3%, respectively, while the MSCI ACWI ex. U.S. Index and the MSCI Emerging Markets index returned just 1.3% and 1.6%, respectively. The S&P 500 reached its all-time high of 2,954 on June 20, 2019.

In fiscal 2019, the U.S. markets experienced notable volatility, mainly due to trade tensions with China and changes to the interbank lending rate. The VIX volatility index had a range of 10.85 to 36.07 for the year, indicating fluctuating market expectations. The VIX ended the fiscal year at 15.08, which is just under its historical average.

Global trade tensions escalated throughout fiscal 2019, as the Trump administration threatened increased tariffs on certain foreign goods and planned to end sanction waivers on imported oil from Iran to trigger negotiations. The ongoing trade war between the U.S. and China worsened during August 2018, as the administration increased tariffs from 10% to 25% on approximately \$200 billion of Chinese imports. China responded with threats to increase tariffs on over \$60 billion of U.S. goods, which further escalated tensions until leaders from both countries agreed to restart negotiations in late June 2019.

The U.S. Real GDP expanded at a rate of 2.9% throughout 2018, despite the market correction in December bringing GDP growth to only 1.1% in the fourth quarter. The U.S. GDP recovered in the first quarter of 2019 with GDP growth reaching 3.1%, and plateauing to 2.9% by the end of June 2019. The recovery in GDP growth can be attributed to increased consumer spending, as well as increases in nonresidential fixed investments.

The Federal Open Market Committee (Fed) tightened early in fiscal 2019, raising the target range for the federal funds rate from 2 to 2-1/4 percent. This was followed by another rate hike in December, raising the target range from 2-1/4 to 2-1/2 percent. After the market correction that occurred in December, The Fed promised rate hikes would halt for the remainder of 2019. It also continued to take steps to reduce its balance sheet after quantitative easing following the 2007-2008 recession.

Fed rate increases throughout the first half of fiscal 2019 coupled with diminishing growth outlook caused the 2-year and 5-year treasury yields to invert in early December. The yield curve inversion coupled with trade war concerns caused massive sell-offs in the market, bringing the S&P 500 down 10.2% in December alone. Although the market recovered from this correction early in 2019, the yield curve inversion remained prominent through the end of the fiscal year. The 6-month and 10-year yield curve inverted in May 2019, further fueling investor fears of an oncoming recession.

The U.S. unemployment rate hit a 50-year low multiple times this year, hitting 3.7% in both September and November. The unemployment rate increased following the December market correction, and ultimately fell back to a new low of 3.6% in April 2019. Rising inflation was interrupted in November and December, with rolling 12-month inflation falling from 2.5% to 1.9% within two months. Fiscal 2019 ended with a 12-month inflation rate of 1.6% as of June 30, 2019. Labor costs have been on the rise throughout fiscal 2019, with 2-year moving averages indicating continued rising labor costs & productivity.

As we enter fiscal 2020, the U.S. economy has signals of slowing growth, despite the strength of U.S. equity markets. Major currency depreciations in countries like Turkey, Argentina, and Indonesia, caused by political instability and financial management concerns, brought instability into Emerging Markets for the first quarter of fiscal 2019. These issues within emerging markets drove market capital towards developed markets, which was encouraged further through rising interest rates in the U.S.

Worries continue to abound with regard to fluctuating trade tensions between the U.S. and China, with the possibility of tariff hikes from both countries; yield curve inversion and the possibility of slowing economic growth globally; waning investor confidence in the U.S. Bond markets; and heavy pressure on central banks to cut lending rates. It is difficult to accurately predict how these factors may impact markets and subsequently the performance of the Prepaid529 Plan during the remainder of fiscal 2020.

The other significant factor in Prepaid529's ability to meet future obligations is the future growth in tuition and mandatory fees. There is an inverse relationship between state funding and the rate at which tuition increases at public higher education institutions. When the state provides additional support to public higher education, institutions are better able to control the rate at which they increase tuition. According to the State Council of Higher Education for Virginia (SCHEV),

as reported in the 2019-20 Tuition and Fees Report, tuition and mandatory educational general (E&G) fees did not increase for in-state undergraduate students, primarily as a result of additional state funding. During the 2019 Session, the General Assembly provided \$52.5 million in general funds to establish a Tuition Moderation Fund and required public institutions wishing to receive their share of the additional funding to maintain in-state undergraduate tuition and mandatory E&G fees at the fiscal 2019 level. All institutions complied with this requirement and did not increase tuition for in-state undergraduate students. The last time this occurred was 20 years ago, also as a result of the General Assembly's action to hold down tuition increases.

While tuition and mandatory E&G fees did not increase, mandatory non-E&G fees (those related to non-instructional activities) increased by 4%. This resulted in an overall increase of \$155 (1.2%) in average tuition and all mandatory fees for in-state undergraduates over the prior year.

Substantial general fund budget reductions over the last decade have adversely impacted the affordability and accessibility of Virginia's public higher education system. The State's contribution to the cost of public higher education is estimated to be 48 percent, which means that on average, in-state undergraduate students will pay more than half of the cost of their education in fiscal 2020. The Commonwealth's contribution is 19 percentage points lower than the target of 67 percent identified in its official tuition policy.

In assessing Prepaid529's financial condition, VA529 has projected that tuition and fee increases at Virginia's public higher education institutions will increase annually by approximately 4.0 percent for the 2020-2022 academic years, and 6.0 percent thereafter for four-year universities, colleges and two-year universities. Future budget shortfalls and corresponding reductions in general fund support to Virginia's public higher education institutions may result in higher tuition and fee increases in future academic years. Changes in public education funding that results in tuition increases above VA529's projections would have an immediate, detrimental impact on VA529's outstanding long-term Prepaid529 obligations. With the statutory requirement that institutions provide updated, long-term tuition projections, VA529 remains in a position to be informed of future tuition and fee increases. However, changes in tuition and fee models at Virginia's public higher education institutions that impact Prepaid529 and unanticipated changes in program revenue or statutorily mandated changes may have an adverse impact on program sustainability.

## **2019 PROGRAM HIGHLIGHTS**

- **Legacy Prepaid529 Program**

Prepaid529 closed to new participants after its final enrollment period during fiscal 2019, which resulted in the purchase of approximately 3,972 contracts by customers. With a long history dating back to 1996, it has been one of the most successful programs in the country. While over time, it experienced brand name changes, contract prices increases, and program structure changes, the defined benefit remained the same. Existing Prepaid529 program customers still have the certainty that VA529 will continue to service their contracts and that Prepaid529 will cover future tuition as defined in their contracts as the normal, in-state, and undergraduate full-time tuition and mandatory fees assessed to all students.

While planning for the final enrollment of Prepaid529, VA529 continued to build and seek approval for a revised prepaid program structure. This followed a Prepaid529 Sustainability Study

in 2016, proposed program structure review in 2017, and a study of VA529's proposed weighted-average tuition (WAT) benefit model by the Joint Legislative Audit & Review Commission (JLARC) that was completed in November 2018. During the 2019 Session, the Virginia General Assembly approved House Bill 1972 and Senate Bill 1315, Chapters 803 and 804, respectively that provided for a new WAT benefit structure for contracts issued after July 1, 2019.

Planning for the new program is ongoing with a targeted launch in late 2020. Integral to this project is the need to focus on program design, materials and development of internal systems, as well as technical and operational procedures. This will also include the finalization of key assumptions for valuation and pricing purposes.

- **Invest529 and CollegeAmerica Investment Updates**

In October 2018, Invest529 retained the Gold rating from Morningstar that was first awarded in October 2016. Morningstar, a leading provider of independent investment research, introduced its ratings on 529 plans in 2010 and evaluates college savings plans on five key pillars - Process, People, Parent, Price, and Performance - which its analysts believe lead to plans that are more likely to outperform over the long term on a risk-adjusted basis. Morningstar evaluated 62 of the largest 529 plans in 2018. Morningstar's ratings from highest to lowest are Gold, Silver, Bronze, Neutral and Negative. Only four college savings programs received the coveted Gold rating and they were noted as standing out for their low costs, strong stewardship, and exceptional investment options. CollegeAmerica retained its strong Silver rating, one of only two advisor based programs to receive such a high rating. Invest529 and CollegeAmerica are two of only fourteen plans that received one of the top two ratings.

During fiscal year 2019, VA529 added the Invest529 Global Equity Portfolio to its actively-managed portfolio offerings. In its effort to manage excess liquidity and enhance earnings, VA529 implemented staggered Certificates of Deposit (CD) products as underlying investments for the Invest529 FDIC-Insured Portfolio.

As of June 30<sup>th</sup>, the CollegeAmerica program offered 43 American Funds mutual funds. Invest529 offered 21 investment options.

- **ABLEnow Growth and ABLEAmerica<sup>®</sup> Launch**

VA529's statutory mission was expanded in 2015 with the passage of the Virginia ABLE Act that gave VA529 responsibility for the development and administration of an ABLE disability savings program. In December 2016, VA529 successfully launched ABLEnow, a direct-sold, defined contribution program to allow individuals with disabilities to save for "qualified disability expenses" without losing certain federal means-tested benefits. Qualified expenses include education, including higher education, housing, transportation, obtaining and maintaining employment, health and wellness, and other personal support expenses. ABLEnow is offered in partnership with PNC Bank, N.A. using a health savings account model providing accounts with the ability to have both an interest-bearing checking account and low-cost investment options. As of June 30, 2019, ABLEnow had 6,135 active accounts and over \$23 million in assets under management.

In July 2018, the American Funds launched ABLEAmerica, the first ABLE plan available through financial advisors. ABLEAmerica is a compliment to ABLEnow by giving those individuals

and families who utilize financial advisors another means through which to access an ABL plan. Investments are offered through seven approved mutual funds at the ABL-A share class level. As of June 30, 2019, ABLEnow had 476 total accounts and over \$3.6 million in assets under management.

- **Account Growth and Transaction Volume**

During fiscal 2019, VA529 experienced varying account growth by program as shown in the table below. Invest529’s 17.3 percent growth rate depicts continued strong growth and corresponds to an additional 49,038 accounts opened during the fiscal year. ABLEnow also continue to experience growth in accounts and VA529 welcomed the launch of the ABLEAmerica program.

Fiscal 2019 Growth in Accounts <sup>1</sup>	
Prepaid529	6.3%
Invest529	17.3%
CollegeAmerica	0.9%
ABLEnow	86.0%
ABLEAmerica	N/A*

<sup>1</sup>Gross accounts opened during fiscal year, except for CollegeAmerica (net) and ABLEnow (net)  
 \* ABLEAmerica was launched in FY19

Transaction volume also continued to increase as participants utilized their college savings accounts. During fiscal 2019, the Plan processed 80,531 Invest529 distribution requests and 20,209 Prepaid529 payments to institutions, representing a 29 percent increase and 2 percent decrease over the prior fiscal year, respectively.

- **Operational and System Improvements**

During fiscal 2019, VA529 continued to make operational improvements to better serve our customers with primary goals to enhance customer functionality, increase transaction efficiency and improve the customer experience. This included continued enhancement of VA529’s web presence, enhancing gifting options, and improving ABLEnow online functionality.

Enhancements were made with regard to customer security, enhanced customer verification and identification for online transactions. In addition, through work with its financial institution, VA529 implemented a direct deposit solution to ensure efficiency in posting customer transactions. Virginia529@Work was also launched to promote collaboration with employers wishing to offer payroll direct deposit to employees for contribution into their VA529 program accounts.

During the 2019 General Assembly Session, VA529 received authorization for the decentralization of Prepaid529 disbursements. This resulted in VA529’s implementation of a controlled disbursement account on July 1, 2019, which allows for the prompt and efficient disbursement of funds to customers and higher education institutions from its own bank accounts with summary reporting of accounting transactions to the Commonwealth’s Cardinal Financials System.

VA529 launched the Banner Forms Transformation Project, a major systems initiative that will extend through December 2019. Banner is the participant recordkeeping and accounting system of record for 529 program and agency operations. In conjunction with this project, VA529 implemented a comprehensive user acceptance testing (UAT) process, which allows for development teams to get instant feedback from users on proposed new system features prior to implementation.

VA529 remains committed to its controls over accounting and financial reporting. During fiscal 2019, it implemented a new travel and expense management system, a new cloud based financial reporting system, and continued development of workflows in its electronic document management system.

- **Joint Legislative Audit and Review Commission (JLARC) Oversight.**

During its 2012 Session, the General Assembly passed, and the Governor signed, the Virginia College Savings Plan Oversight Act, which provided for oversight and evaluation on a continuing basis by JLARC. The legislation was not the result of any problem or deficiency.

As previously reported, JLARC issued its third biennial status report on VA529 in June 2018 and noted that VA529's programs had grown and met long-term performance goals. The report noted that the Prepaid529 program was 138 percent funded on an actuarial basis as of June 30, 2017, but that the fund's investments had underperformed their benchmark for certain shorter-term periods. The report noted however, that the Investment Advisory Committee oversaw the investment strategies and that the Committee indicated that the fund was defensively positioned with the intent of outperforming over the long term to achieve the Prepaid529 program's long-term assumed rate of return. The report also discussed recent changes in the fund's benchmark that were implemented in 2018 following an internal review to improve performance transparency. JLARC, as directed in the 2018 Appropriation Act, initiated their own study of the fund's benchmarks to determine whether they were appropriate to measure performance given the fund's goals, strategies and risk tolerance as established by VA529. The study was completed in fiscal 2019 by JLARC, which included a benchmark review by an external consulting firm. Proposed changes were considered by the VA529 and the Investment Advisory Committee and resulting changes were incorporated into the Prepaid529 Investment Policy and Guidelines during fiscal 2019.

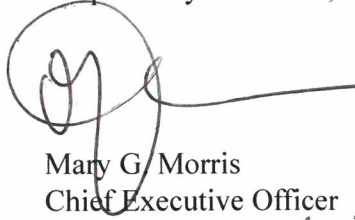
JLARC also issued its report on the Proposed Change to Payout Model of Virginia's Prepaid529 Program, which included a recommendation that the General Assembly may wish to change the current structure of the Prepaid529 to the weighted average tuition model as proposed by VA529 and included other recommendations for VA529's consideration in the administration of such model. As noted previously, the General Assembly passed legislation in fiscal 2019 authorizing the proposed structure. This report can be found on JLARC's website at <http://jlarc.virginia.gov/vcsp.asp>. We look forward to continuing our relationship with JLARC.

#### **ACKNOWLEDGEMENTS**

We remain committed to providing the best possible customer service to our program participants and to the citizens of the Commonwealth, and to being responsible stewards of the funds in our care. We express our sincere thanks and appreciation to our outstanding staff and our

business partners and for the guidance and dedication of our Board and Committee members.

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'Mary G. Morris', with a long horizontal line extending to the right.

Mary G. Morris  
Chief Executive Officer

A handwritten signature in black ink, appearing to be 'Vivian Shields', written in a cursive style.

Vivian Shields  
Chief Financial Officer

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## Independent Auditor's Report

To: Members of the Board  
Virginia College Savings Plan  
N. Chesterfield, VA 23236

### Report on the Financial Statements

We have audited the accompanying financial statements of the business type activities (the Enterprise Fund) and the remaining fund information (the Private Purpose Trust Fund) of the Virginia College Savings Plan (the Plan) as of and for the year ended June 30, 2019, and the related notes to the financial statements which collectively comprise the Plan'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 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 from material misstatement.

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

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

## **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business type activities and the remaining fund information of the Virginia College Savings Plan as of June 30, 2019, and its respective changes in net position for the year then ended in conformity with accounting principles generally accepted in the United States of America.

## **Emphasis of Matters**

### *Reporting Entity*

As discussed in Note 1, the financial statements of the Plan, are intended to present the financial net position, the changes in financial net position and cash flows of only that portion of the business-type activities, and the aggregate remaining information that is attributable to the transactions of the Plan. They do not purport to, and do not, present fairly the financial position of the Commonwealth of Virginia as of June 30, 2019, and the changes in their financial position and their cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America. Our opinions are not modified with respect to this matter.

### *Alternative Investments*

As discussed in Notes 1 and 4 to the financial statements of the Plan, total system investments include investments valued at \$1,006.4 million (33.0% of total assets) for the Enterprise Fund and \$117.01 million (2.3% of total assets) for the Private Purpose Trust Fund, respectively, as of June 30, 2019, whose fair values have been estimated by management in the absence of readily determinable values. Management's estimates are based on information provided by the fund managers or the general partners. Our opinions are not modified with respect to that matter.

## **Other Matters**

### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 7-21, the Schedule of Plan's Proportionate Share of the Net Pension Liability, Schedule of the Plan's Contributions, Schedule of Plan's Share of Net OPEB Liability Group Life Insurance Program (GLIP), Schedule of Plan's Contributions GLIP, Schedule of Plan's Share of Net OPEB Liability Health Insurance Credit Program (HICP), Schedule of Plan's Contributions HICP, Schedule of Plan's Share of Net OPEB Liability Virginia Sickness and Disability Program (VSDP), Schedule of Plan's Contributions VSDP Schedule of Plan's Share of Total OPEB Liability – Pre-Medicare Retirees, and respective notes to the required supplementary information on pages 71-77, 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 financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context.

We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

*Other Information*

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Plan's basic financial statements. The accompanying supplementary information including, Appendix A, Appendix B, Appendix C, Appendix D (supplementary information), the letter of transmittal and other information are presented for purposes of additional analysis and are not a required part of the financial statements.

The supplementary information is the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the financial statements. Such 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 financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplementary information is fairly stated, in all material respects, in relation to the financial statements taken as a whole.

The letter of transmittal, other information and board members 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.

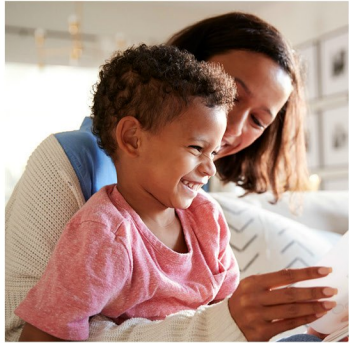
**Other Reporting Required by *Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued a report dated November 15, 2019 on our consideration of the Plan's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, grant agreements, and other matters. The purpose of that report is solely 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 effectiveness of the Plan's 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 Plan's internal control over financial reporting and compliance.

A handwritten signature in black ink that reads "Eide Bailly LLP". The signature is written in a cursive, flowing style.

Boise, Idaho  
November 15, 2019

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# Management's Discussion & Analysis



**Virginia529<sup>SM</sup>**  
**ABLEnow<sup>®</sup>**

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**VIRGINIA COLLEGE SAVINGS PLAN'S  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
Unaudited**

The Virginia College Savings Plan's (VA529) Management's Discussion and Analysis is designed to assist the reader in focusing on significant financial issues and provides an overview of financial activity. This discussion includes an analysis of VA529's financial condition and results of operations for the fiscal year ended June 30, 2019. This presentation includes summarized data and should be read in conjunction with the accompanying financial statements and notes.

VA529 operates the Commonwealth's Internal Revenue Code (IRC) Section 529 qualified tuition plan, which offers three programs, Prepaid529<sup>SM</sup> (Prepaid529), Invest529<sup>SM</sup> (Invest529), and CollegeAmerica<sup>®</sup>. Prepaid529 is a defined benefit program, which closed to new participants in fiscal 2019. Contracts in this program are based on actuarially determined prices that provide the future payment of undergraduate tuition for the normal full-time course load for students enrolled in a general course of study at any Virginia public higher educational institution and all mandatory fees required as a condition of enrollment of all students, and differing payouts at private or out-of-state institutions. Annually, VA529's actuary determines the actuarial soundness of Prepaid529. Key factors used in the actuarial analysis include anticipated tuition increases (both short and long-term) as well as anticipated long-term investment performance. Invest529 is a defined contribution savings program, which allows participants to make contributions into their selected investment portfolio(s). Invest529 accounts are subject to market investment risks, including the possible loss of principal.

CollegeAmerica is also a defined contribution savings program. CollegeAmerica, a broker-sold program, offers 43 different American Funds mutual fund products as investment options. CollegeAmerica participants bear all market risk for their investment, including the potential loss of principal. The American Funds acts as program manager for CollegeAmerica and provides all back office and operational services for the program.

VA529 also operates the Commonwealth's IRC Section 529A programs. The Stephen Beck, Jr. Achieving a Better Life Experience (ABLE) Act authorized states to offer tax-advantaged savings programs for individuals with disabilities. ABLEnow<sup>®</sup> and ABLEAmerica<sup>®</sup>, both defined contribution plans, are VA529's tax-advantaged savings programs for people with disabilities. The American Funds acts as program manager for ABLEAmerica. These programs presented in Other Information are not audited.

### **Overview of Financial Statements**

This discussion and analysis is an introduction to VA529's basic financial statements, which include VA529's business-type activity or enterprise fund, the fiduciary or private purpose trust fund, and notes to the financial statements.

#### Business Type Activities – Enterprise Fund

All Prepaid529 activities and VA529's operating activities are accounted for in an enterprise fund (a statutorily-created special nonreverting fund), which is typically used to account for governmental operations that are financed and operated in a manner similar to a private sector business. Enterprise funds typically report activities that charge fees for supplies or services to the general public. This activity is reported on the full accrual basis of accounting. This means that all revenue and expenses are reflected in the financial statements even if the related cash has not been received or paid as of fiscal year-end (June 30<sup>th</sup>).

The Statement of Net Position presents information on all Prepaid529 assets and deferred outflows of resources as well as liabilities and deferred inflows of resources, with the difference between the two reported as total net position. Over time, increases and decreases in net position along with the information contained in the annual actuarial soundness report indicate Prepaid529's financial position.

The Statement of Revenues, Expenses, and Changes in Net Position presents the revenues earned and expenses incurred during the year, including both actual as well as actuarially determined contract payments from participants and distributions for higher education expenses.



The Statement of Cash Flows presents information related to cash inflows and outflows summarized by operating, financing, and investing activities.

Fiduciary Fund

Invest529 is reported as a private purpose trust fund. A private purpose trust fund accounts for transactions of trust arrangements in which the principal and income benefit individuals, private organizations or other governments, and uses the full accrual basis of accounting.

Invest529 activities are reported in the Statement of Fiduciary Net Position and the Statement of Changes in Fiduciary Net Position. The Statement of Fiduciary Net Position presents information on all Invest529 assets and liabilities, with the difference between the two reported as net position held in trust for program participants. The Statement of Changes in Fiduciary Net Position presents the revenues earned and expenses incurred during the year.

Notes to the Financial Statements

The Notes to the Financial Statements provide additional information that is essential to a full understanding of the data provided in the financial statements.

Other Information

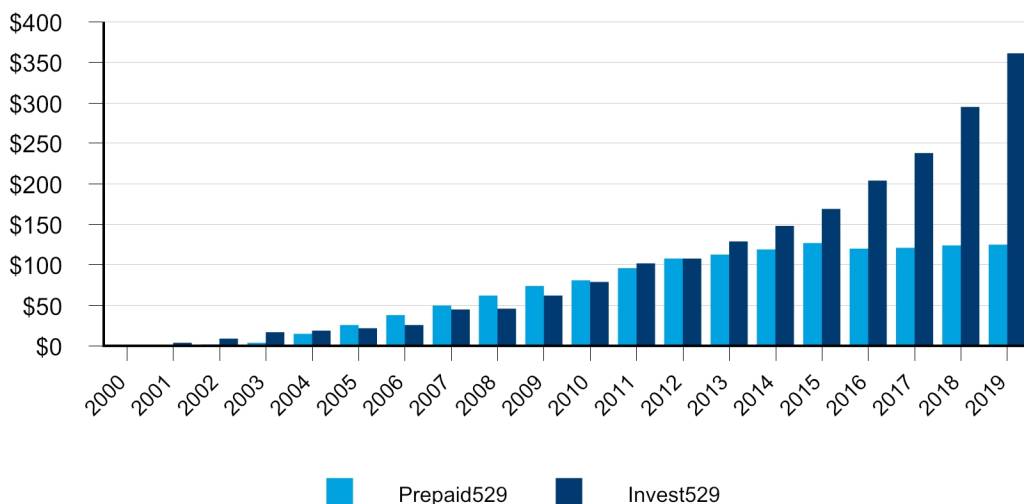
CollegeAmerica, ABLEnow, and ABLEAmerica are defined contribution savings programs and are presented as Other Information. CollegeWealth, which closed to new participants in fiscal 2017, is also presented as Other Information. Other Information is unaudited but presented as additional information.

**Fiscal 2019 Financial Highlights**

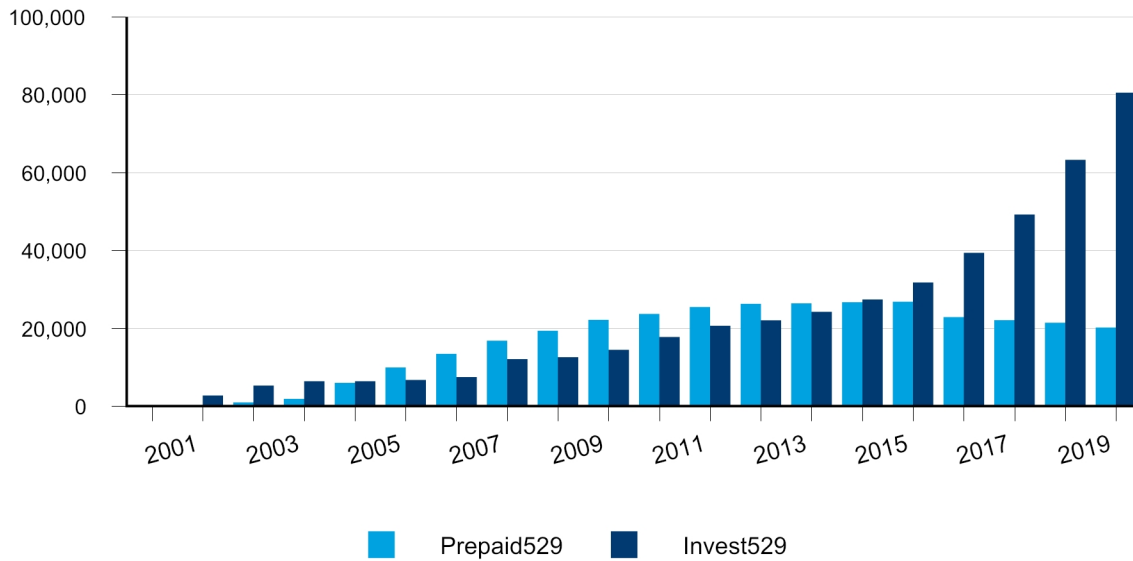
In aggregate, market movements had an overall net positive effect on fixed income and equity security prices in the Prepaid529 and Invest529 portfolios for the fiscal year ended June 30, 2019. Transaction activity also increased as customers continued to fund their college savings accounts and use them to pay higher education expenses.

The two graphs below represent Invest529 and Prepaid529 distributions since fiscal year 2000.

**Amounts Distributed per Fiscal Year**  
*Dollars in Millions*



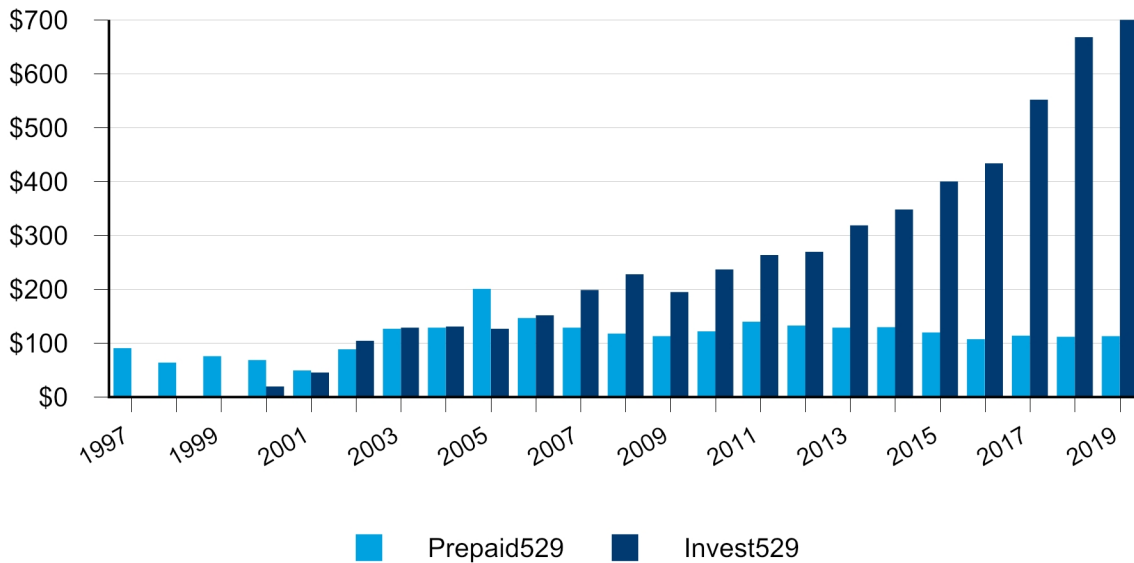
### Number of Distributions on Behalf of Beneficiaries per Fiscal Year



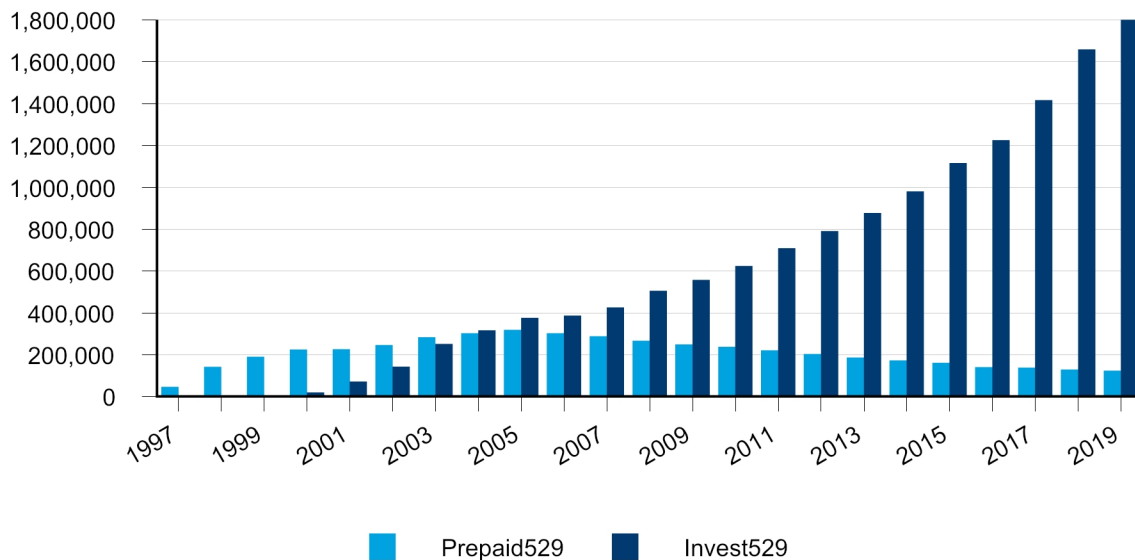
The two graphs below represent Prepaid529 contract payments and Invest529 contributions received since fiscal year 1997 - Invest529 being introduced in fiscal 2000.

### Amounts Received per Fiscal Year

*Dollars in Millions*



**Number of Payments/Contributions Received per Fiscal Year**



The graph below represents Invest529 and Prepaid529 active accounts under management at fiscal year-end since fiscal year 1997 - Invest529 being introduced in fiscal 2000.

**Growth in Accounts Under Management per Fiscal Year**

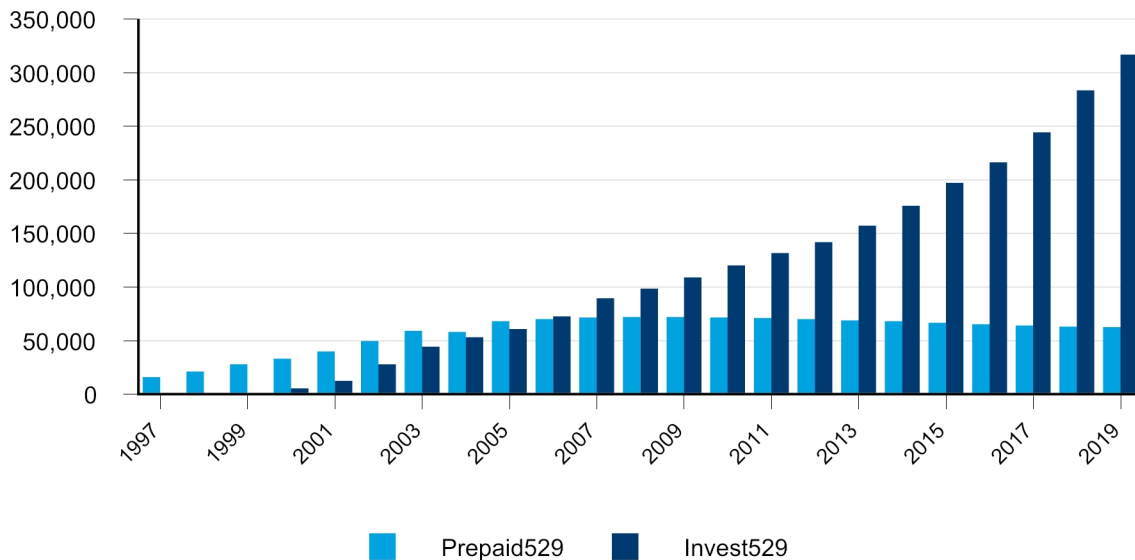


Table 1 demonstrates the numbers of students served, the amounts paid from Prepaid529 directly to Virginia public universities and community colleges, and the amounts paid from Invest529 on behalf of beneficiaries associated with the respective university or community college during fiscal year 2019. Actual payments from Invest529 may have been issued to account owners, beneficiaries, or the respective university or community college.

**Table 1**  
**Prepaid529 and Invest529 Payments to or Associated with Virginia Public Universities and Community Colleges**  
**Fiscal Year 2019**

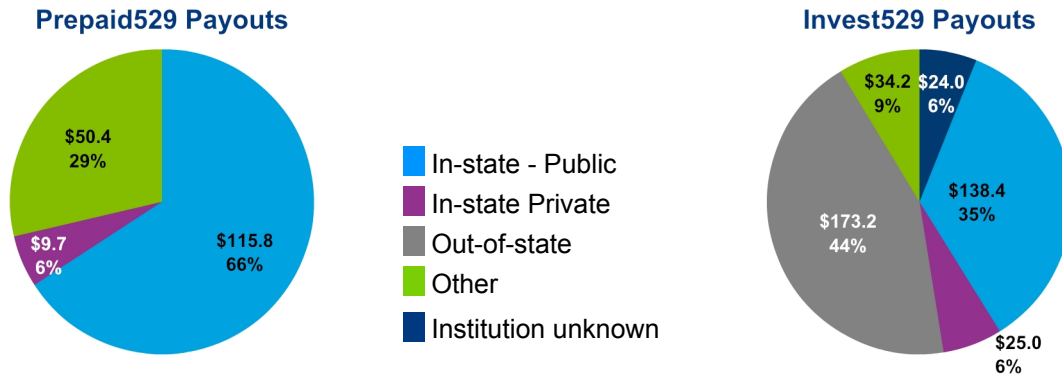
Public Universities	Prepaid529		Invest529	
	Number of Students	Payments to Universities	Number of Students	Payments Associated with Universities
University of Virginia	1,577	\$ 24,681,505	1,726	\$ 26,329,023
Virginia Tech	1,805	23,042,757	2,254	29,458,510
Virginia Commonwealth University	1,180	13,968,639	1,132	12,748,669
College of William & Mary	575	12,168,673	631	10,903,238
James Madison University	995	10,607,733	1,585	19,415,036
George Mason University	848	9,043,104	1,159	12,983,122
Christopher Newport University	455	6,397,858	427	5,569,109
Old Dominion University	362	2,899,992	449	3,861,346
Longwood University	251	2,831,998	204	2,247,240
University of Mary Washington	247	2,787,849	365	4,421,469
Radford University	254	2,500,944	308	2,977,943
Virginia Military Institute	67	1,138,070	71	812,043
University of Virginia's College at Wise	14	121,826	20	150,663
Virginia State University	12	90,700	23	138,039
Norfolk State University	9	80,665	17	95,518
<b>Total Universities</b>	<b>8,651</b>	<b>\$ 112,362,313</b>	<b>10,371</b>	<b>\$ 132,110,970</b>

Community Colleges	Prepaid529		Invest529	
	Number of Students	Payments to Community Colleges	Number of Students	Payments Associated with Community Colleges
Northern Virginia Community College	448	\$1,424,419	857	\$2,959,697
Tidewater Community College	127	375,038	139	434,538
J Sargeant Reynolds Community	111	291,010	133	441,878
Germanna Community College	66	176,751	94	296,774
John Tyler Community College	107	170,039	148	460,520
Lord Fairfax Community College	51	136,552	69	170,245
Thomas Nelson Community College	51	133,523	76	234,487
Virginia Western Community College	43	116,945	56	141,134
Blue Ridge Community College	24	84,360	42	196,480
Piedmont Virginia Community College	35	75,480	85	384,543
Richard Bland College	11	70,200	18	82,816
New River Community College	24	56,662	38	122,739
Rappahannock Community College	17	34,804	17	25,322
Central Virginia Community College	16	34,619	29	81,022
Wytheville Community College	7	23,699	8	15,110
Danville Community College	8	21,752	6	28,959
Southwest Virginia Community College	6	17,855	1	1,000
Patrick Henry Community College	5	13,058	7	30,899
Southside Virginia Community College	6	11,803	4	8,717
Virginia Highlands Community College	3	10,161	5	13,102
Paul D Camp Community College	5	8,040	4	14,915
Mountain Empire Community College	2	5,652	2	4,404
Eastern Shore Community College	1	4,628	2	3,520
Dabney S Lancaster Community College	1	2,177	3	2,323
<b>Total Community Colleges*</b>	<b>1,175</b>	<b>\$ 3,299,226</b>	<b>1,843</b>	<b>\$ 6,155,145</b>

\*Includes Richard Bland College; Virginia's only 2-year junior college

Chart 1 below reflects the types of institutions to which benefits are paid. Most Prepaid529 payments are made to in-state public institutions on behalf of the beneficiary pursuant to the contracts. Prepaid529 benefits paid for those students attending an out-of-state school are distributed by transferring benefits to an Invest529 account, which represent a portion of 'Other' Prepaid529 Payouts. The majority of Invest529 payments are made directly to account owners or beneficiaries for expenses paid to institutions, including out-of-state institutions. 'Other' payments reflected in Chart 1 include rollovers to another state's plan, rollovers/transfers to another VA529 program, other distributions to account owners and beneficiaries, and refunds to the account owner.

**Chart 1**  
**2019 Program Payouts by Institution Type (in millions)**



### Analysis of Enterprise Fund Financial Activities

The Enterprise Fund includes the activities of Prepaid529 as well as VA529's general operating activities. The Enterprise Fund ended the year with net position of \$1,029.4 million. The Enterprise Fund's change in net position increased by \$244.8 million during the fiscal year, primarily due to an increase in investment return coupled with a decrease in tuition benefits expense as explained further in the following paragraphs.

Table 2 is a summary comparison of the Enterprise Fund's Statement of Revenues, Expenses, and Changes in Net Position for fiscal year 2019 as compared to the prior year.

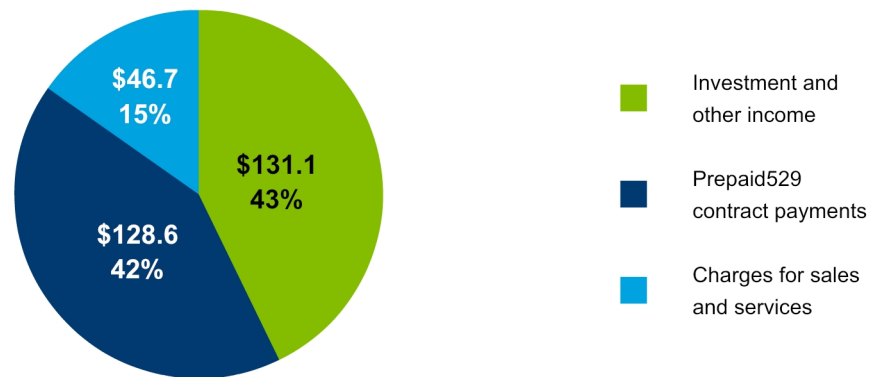
**Table 2 – Enterprise Fund – Changes in Net Position (in millions)\***

YEARS ENDED JUNE 30,	2019	2018	CHANGE
Operating revenues			
Charges for sales and services	\$ 46.7	\$ 45.7	\$ 1.0
Interest and dividends (net)	129.8	147.0	(17.3)
Net increase (decrease) in fair value of investments	1.4	(11.8)	13.1
Prepaid529 contract payments	128.6	114.4	14.2
<b>Net operating revenues</b>	<b>306.4</b>	<b>295.4</b>	<b>11.0</b>
Operating expenses			
Tuition benefits expense	32.1	266.0	(234.0)
Other operating expenses	29.1	25.3	3.9
<b>Net operating expenses</b>	<b>61.2</b>	<b>291.3</b>	<b>(230.1)</b>
Operating income (loss)	245.2	4.1	241.1
Non operating revenue (expense) net	—	(2.7)	2.7
Income (loss) before transfers	245.2	1.4	243.8
Transfer to the Commonwealth	(0.4)	(0.6)	0.3
<b>Change in net position</b>	<b>244.8</b>	<b>0.8</b>	<b>244.0</b>
Net position, beginning	784.6	783.8	0.8
<b>Net position, ending</b>	<b>\$ 1,029.4</b>	<b>\$ 784.6</b>	<b>\$ 244.8</b>

\*Amounts may not sum due to rounding

The Prepaid529 portfolio's asset allocation benefited from the strong performance of emerging market equities, as well as certain fixed income classes as reflected in the rate of return for fiscal 2019 of 4.92 percent. For the fiscal year ended June 30, 2019, a net increase is reflected in the fair value of investments of approximately \$1.4 million, versus the decrease in the prior fiscal year of \$11.8 million. This slight increase is a result of a \$21 million increase in dividends and interest, a \$35 million decrease in realized gains and the remainder primarily attributable to the difference in pending trades accrued year over year. The fair market value of investment securities changes on a daily basis depending upon market conditions. This number will fluctuate from year to year, depending upon market conditions as of June 30th, or the last business day of the fiscal year. Investment income represents about 43 percent of enterprise fund revenue, as shown in Chart 2.

**Chart 2**  
**2019 Enterprise Fund Revenue**  
**in millions**

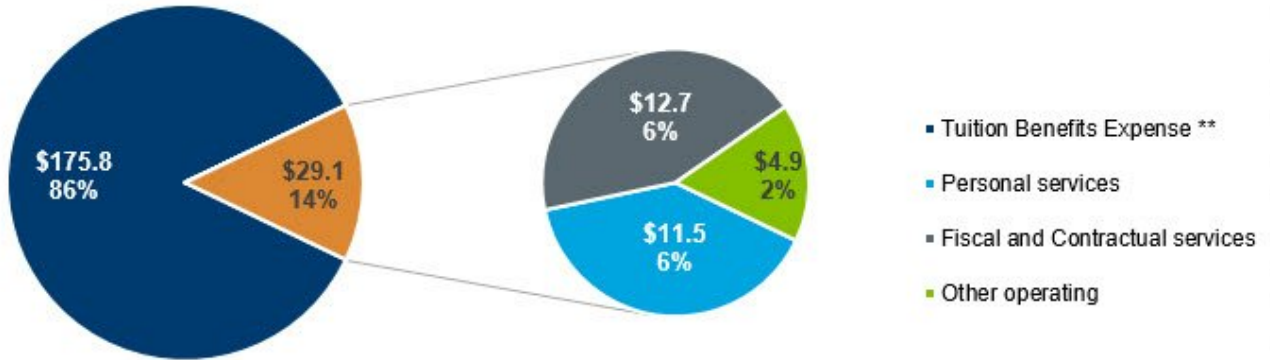


Prepaid529 contract payment revenue includes actual and actuarially estimated contract payments, and represents approximately 42 percent of enterprise fund revenue. Actual contract payments received from participants decreased by \$1.6 million over prior year receipts. In addition, actuarially determined Prepaid529 contract payment revenue increased by \$15.8 million. Receipts for charges for sales and services increased during fiscal year 2019 by \$1.0 million. This increase is attributable to growth in assets in the CollegeAmerica program.

Table 2 also reflects tuition benefits expense, which is comprised of two components; actuarially determined and actual tuition benefits expenses. Tuition benefits expense decreased by \$233.9 million from fiscal year 2018. The actuarially determined tuition benefit expense is accrued for estimated expenses, as determined by VA529's actuary, and represents the net change in tuition benefits payable over the prior fiscal year end. This actuarially determined amount decreased from the previous fiscal year end accrual by \$230.8 million, primarily due to tuition assumptions versus actual tuition increases. Actual tuition benefits expense represents actual distributions made during the fiscal year. This amount decreased over the prior year by \$3.1 million, or 1.7 percent.

As shown in Chart 3, tuition benefit payments represent 86 percent of actual expenses of the Enterprise Fund. Of the \$29.1 million expended for administration and operations expenses, 83 percent were for personal and contractual services.

**Chart 3**  
**2019 Enterprise Fund Expenses**  
 in millions\*



\* Amounts may not sum due to rounding

\*\* Does not include actuarial tuition benefits

Table 3 provides a comparison of administration and operations expenses between fiscal years 2019 and 2018, which increased by 15.3 percent.

**Table 3 – Enterprise Fund**  
**Plan Administration and Operations Expenses (in thousands)\***

YEARS ENDED JUNE 30,	2019	2018	CHANGE
Personal services	\$ 11,536	\$ 10,851	\$ 685
Actuarial pension expense	829	1,167	(338)
Fiscal and contractual services	12,724	10,086	2,638
Supplies and materials	62	51	11
Depreciation	227	511	(284)
Rent, insurance, and other related charges	897	255	641
Expendable equipment	672	255	416
SOAR Virginia	2,000	2,000	—
Other	185	84	102
<b>Administration and Operations Expenses</b>	<b>\$ 29,133</b>	<b>\$ 25,261</b>	<b>\$ 3,872</b>

\* Amounts may not sum due to rounding

Personal services expense increased by \$685,258, or 6.3 percent, over the prior year's amount. The increase is attributable to hiring additional staff, and salary and incentive increases as provided in VA529's Compensation Plan approved by the General Assembly. Expenses for fiscal and contractual services represent about 43.8 percent of fiscal 2019 administrative expenses. This expense category experienced an increase of \$2.6 million, or 26.2 percent, over the prior year due to increases in marketing, information technology, and banking and custodial services in fiscal 2019. Depreciation expense decreased by \$283,586. Rent, insurance, and other related charges increased by \$641,108, or 252 percent. These changes were due to the reclassification of the Arboretum Office Building lease to an operating lease, previously recognized as a capital lease.



**Table 4 – Enterprise Fund  
Summary of Net Position (in millions)\***

<b>As of JUNE 30,</b>	<b>2019</b>	<b>2018</b>	<b>CHANGE</b>
<b>Assets and deferred outflows:</b>			
Current assets	\$ 141.1	\$ 152.6	\$ (11.5)
Investments	2,746.2	2,671.8	74.4
Capital Assets	1.0	0.8	0.3
Other noncurrent assets	160.1	147.0	13.1
<b>Total assets</b>	<b>3,048.4</b>	<b>2,972.1</b>	<b>76.3</b>
Total deferred outflows	2.1	1.9	0.1
Assets and deferred outflows	3,050.5	2,974.1	76.4
<b>Liabilities and deferred inflows:</b>			
Current liabilities	297.8	320.6	(22.8)
Noncurrent liabilities	1,721.5	1,867.6	(146.0)
<b>Total liabilities</b>	<b>2,019.3</b>	<b>2,188.2</b>	<b>(168.8)</b>
Total deferred inflows	1.8	1.3	0.5
Liabilities and deferred inflows	2,021.1	2,189.4	(168.4)
<b>Net Position</b>			
Investment in capital assets	1.0	0.8	0.3
Restricted	0.4	—	0.4
Unrestricted	1,028.0	783.9	244.2
<b>Total net position</b>	<b>\$ 1,029.4</b>	<b>\$ 784.6</b>	<b>\$ 244.8</b>

\*Amounts may not sum due to rounding

### Assets

Long-term investments increased by 2.8 percent, attributable to strong market conditions. Other noncurrent assets represents the noncurrent portion of tuition contributions receivables which increased by \$13.1 million for fiscal 2019. This represents the increase in the actuarially determined amount expected to be collected from contract holders of record in future years.

### Liabilities

Current liabilities decreased by \$22.8 million. Noncurrent liabilities decreased by \$146.0 million. These decreases are due to the change in the actuarial present value of the future tuition obligations. Changes in the present value of the future tuition benefit obligation can be attributed to the passage of time, unit redemptions and new unit sales, differences between actual experience and the actuarial assumptions used, and changes to the actuarial assumptions.

### Actuarial Soundness

VA529's statute requires that it annually determine the actuarial soundness of Prepaid529. The purpose of the actuarial valuation is to assess the future value of VA529's assets and liabilities, which are discounted to reflect their present value.

During fiscal year 2019, Prepaid529's actuarial reserve position, as calculated by VA529's actuary and reported in the 2019 Actuarial Valuation Report, increased from an actuarial surplus of \$784.6 million to a surplus of \$1,029.4 million. Lower than expected tuition increases during fiscal 2019 also contributed to earnings on the actuarial reserve and other actuarial gains. Actuarial assumptions are discussed in Note 9 in the Notes to the Financial Statements.

The overall effect of the changes on the actuarial reserve is summarized in Table 5. Table 5 reflects the actuarial gains and losses and the Actuarial Reserve as of June 30, 2019 as calculated by VA529's actuary using preliminary financial statements developed and provided by VA529 as reflected in the draft Actuarial Valuation Report as of October 31, 2019. The final report is expected to be completed no later than mid-December 2019. Any adjustments to the final Actuarial Reserve and the estimated valuation will be reflected and disclosed in subsequent year's financial statements. A copy of the 2019 Actuarial Valuation Report may be obtained from VA529.

**Table 5 – Prepaid529**  
**Statement of Changes in Actuarial Reserve** (dollars in millions)

Actuarial Reserve / (Deficit) as of June 30, 2018	\$ 784.6
Interest on the reserve at 5.75%	45.1
Investment gain / (loss)	(21.5)
Tuition gain / (loss)	62.6
Lower than expected actual account balances	4.5
Sale of new contracts	7.7
Administrative fee revenue from Virginia529	24.5
Change to reasonable rate and volatility assumptions	14.1
Change to tuition growth assumptions	66.6
Other experience gains	41.2
Actuarial Reserve / (Deficit) as of June 30, 2019	<u>\$ 1,029.4</u>

Prepaid529's overall funded status, as calculated by the actuary, as of June 30, 2019 was 151.7 percent. Chart 4 provides Prepaid529's funded status since 1997.

**Chart 4**  
**Prepaid529 Actuarially Funded Percentage as of June 30th (rounded)**

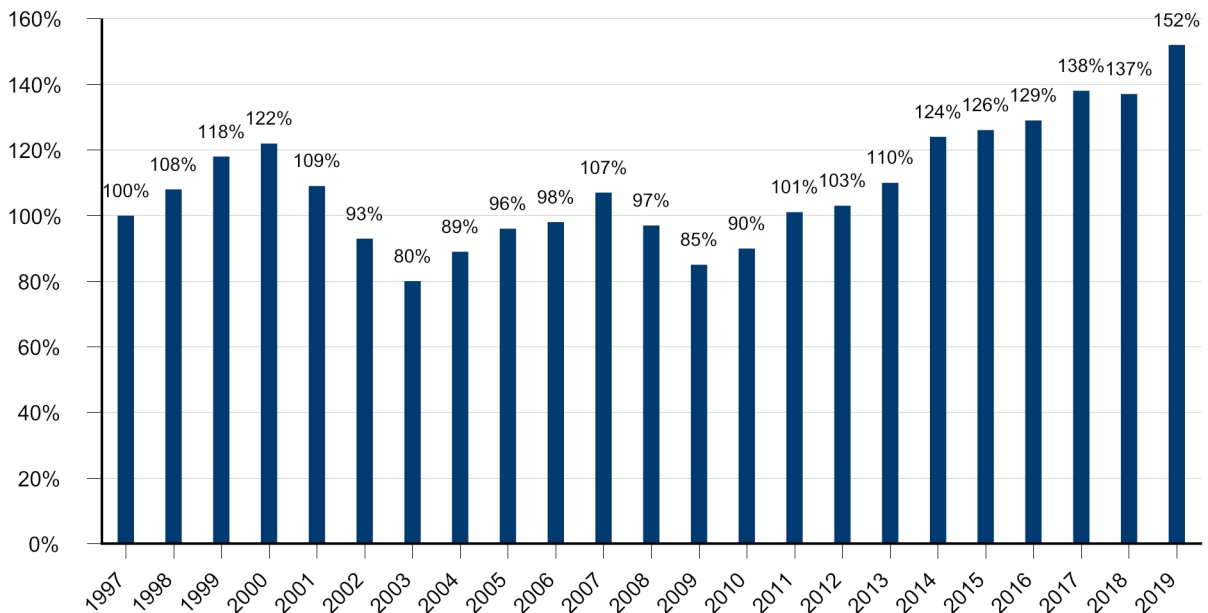


Table 6 represents the condensed Statement of Cash Flows for the Enterprise Fund for the fiscal years ended June 30, 2019 and 2018. VA529's year-end cash balance in the Enterprise Fund decreased by \$1.9 million.

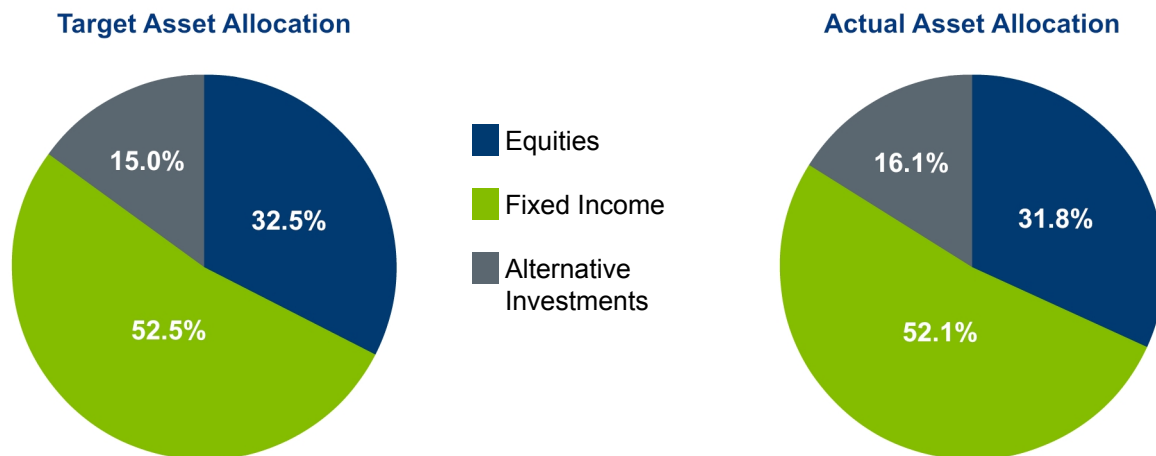
**Table 6 – Enterprise Fund  
Statement of Cash Flows (in millions)**

<u>As of June 30,</u>	<u>2019</u>	<u>2018</u>
Cash provided (used) by:		
Operating activities	(\$44.9)	(\$50.6)
Noncapital financing activity	(0.4)	(0.6)
Capital and related financing activities	(0.5)	(0.7)
Investing activities	43.9	43.5
Net increase (decrease) in cash	(1.9)	(8.5)
Cash – beginning of year	69.3	77.8
Cash – end of year	\$67.4	\$69.3

In fiscal 2019, the Board revised its Investment Policies and Guidelines for Prepaid529 and Invest529. Changes primarily related to the benchmarks within the Prepaid529 Guidelines. The Prepaid529 benchmarks were revised during the year such that composite benchmarks are constructed using a top down methodology in which asset class benchmarks are based on portfolio modeling. Chart 5 below illustrates the target and actual asset allocations of Prepaid529 as of fiscal year end. During the fiscal year the Board also reviewed and approved Investment Policies and Guidelines for the ABLEnow program.

In fiscal 2019, the Investment Advisory Committee terminated Donald Smith & Company as a domestic equity manager for Prepaid529. The liquidation of assets was largely complete by fiscal year end with proceeds being temporarily invested in the Vanguard 500 Index Fund. Additionally during the fiscal year the committee hired Sands Capital Management as an emerging markets equity manager for Prepaid529. A complete list of Prepaid529 managers as of June 30, 2019 can be found in Appendices A and B.

**Chart 5  
Prepaid529 Asset Allocation as of June 30, 2019**



**Analysis of Fiduciary Fund (Invest529)  
Financial Activities**

Table 7 presents a summary of Invest529's assets and liabilities for fiscal 2019 and 2018. Cash decreased by \$18.5 million from fiscal year 2018. VA529 engages various investment managers to invest the funds of the Invest529 program. The cash position fluctuates as these managers purchase and sell investments. Strong market conditions and continued increases in participant contributions during the fiscal year resulted in a 13.7 percent increase in investments.

**Table 7 – Invest529**  
**Statement of Fiduciary Net Position (in millions)\***

<b>Fiscal year ended June 30</b>	<b>2019</b>	<b>2018</b>	<b>Change</b>
<b>Assets:</b>			
Cash	\$ 115.8	\$ 134.3	\$ (18.5)
Receivables	5.4	5.6	(0.2)
Investments	4,991.4	4,391.5	599.9
<b>Total Assets</b>	<b>5,112.6</b>	<b>4,531.3</b>	<b>\$ 581.2</b>
<b>Liabilities</b>	<b>8.9</b>	<b>9.4</b>	<b>(0.5)</b>
<b>Net position held in trust, ending</b>	<b>\$ 5,103.7</b>	<b>\$ 4,522.0</b>	<b>\$ 581.7</b>

\*Amounts may not sum due to rounding

Table 8 reflects the change in Invest529's net position for fiscal 2019. Additions to the fiduciary net position held in trust include contributions from participants as well as net investment income. Contributions represent amounts received from new and existing account holders. Contributions from Invest529 participants increased from the previous year by approximately \$42 million and there were more than 49,000 new Invest529 accounts opened during the fiscal year. Educational expense benefit payments made on behalf of participants represent 91 percent of Invest529 deductions. As anticipated, overall disbursements to Invest529 account owners, beneficiaries, and institutions increased over the prior year by approximately 20.7 percent as more participants withdrew funds for higher education expenses.

**Table 8 – Invest529**  
**Change in Fiduciary Net Position (in millions)**

<b>Fiscal year ended June 30</b>	<b>2019</b>	<b>2018</b>	<b>Change</b>
Additions	\$ 979.0	\$ 906.4	\$ 72.7
Deductions	397.3	329.1	68.2
<b>Net Increase (decrease)</b>	<b>581.7</b>	<b>577.2</b>	<b>4.5</b>
<b>Net position held in trust, beginning</b>	<b>4,522.0</b>	<b>3,944.7</b>	<b>577.2</b>
<b>Net position held in trust, ending</b>	<b>\$ 5,103.7</b>	<b>\$ 4,522.0</b>	<b>\$ 581.7</b>

\*Amounts may not sum due to rounding

In October 2018, Invest529 received a Gold rating from Morningstar. Morningstar is a leading provider of independent investment research in North America, Europe, Australia, and Asia. Morningstar offers an extensive line of products and services for individual investors, financial advisors, asset managers, and retirement plan providers and sponsors. Morningstar introduced its ratings on 529 plans in 2010 and evaluates college savings plans on five key pillars – Process, Performance, People, Parent, and Price – which its analysts believe lead to plans that are more likely to outperform over the long term on a risk-adjusted basis. Morningstar evaluated the majority of 529 plans in 2018. Morningstar's ratings from highest to lowest are Gold, Silver, Bronze, Neutral and Negative. Invest529 was one of four plans to receive a Gold rating.

In fiscal 2019, the Invest529 age-based portfolios evolved in accordance with the rebalancing policy along their scheduled glide paths, which emphasizes more income and preservation of capital as the portfolios proceed towards their final evolution. This evolution represented one of the minor steps in order to maintain a progressive evolution in the glide path. The next major step evolution will occur on January 1, 2021 where the portfolios will hit their respective triennial target allocations as set forth in the Invest529 Program Description.

#### **CollegeAmerica, CollegeWealth, ABLEnow and ABLEAmerica**

Assets under management in CollegeAmerica increased during the fiscal year by approximately 3.5 percent from \$64.2 billion to \$66.4 billion. There were an additional 21,324 unique CollegeAmerica accounts at fiscal year-end compared to the prior fiscal year-end.

Assets under management in CollegeWealth decreased by 21 percent in fiscal year 2019 to approximately \$37.7 million at year end. The program was closed to new participants during fiscal year 2017 in conjunction with the opening of the Invest529 FDIC-Insured Portfolio. Remaining CollegeWealth assets represent those assets held in savings instruments at BB&T.

ABLEnow, VA529's direct-sold ABLE disability savings program, launched in fiscal year 2017 and saw continued growth in fiscal year 2019. As of June 30, 2019, there were 6,135 active accounts. Assets under management increased by more than \$12.76 million, ending the fiscal year at approximately \$23 million.

ABLEAmerica, VA529's broker-sold ABLE disability savings program, launched in fiscal year 2019. As of June 30, 2019, there were 337 unique active accounts and \$3 million in assets under management.

These college and disability savings programs are presented as Other Information to VA529. Additional information on these programs can be found in this section of the report.

### **Economic Factors and Outlook**

VA529 continues to remain optimistic that its asset allocation and investment strategies will result in the Prepaid529 portfolio meeting or exceeding performance expectations over the long term. VA529 has assumed a long-term rate of return of 5.75 percent on the Prepaid529 investments. As of June 30, 2019, the total return since inception was about 6.18 percent net of fees and reflected Prepaid529's 4.92 percent investment performance during fiscal 2019. Domestic equity and fixed income markets continue to perform well into fiscal 2020 having a positive impact on Prepaid529 portfolio performance. Portfolio performance through the balance of fiscal 2020 will depend on many factors.

In assessing Prepaid529's financial condition, VA529 has projected that tuition and fee increases at Virginia's public higher education institutions will increase annually by approximately 4.0 percent for the two academic years beginning Fall 2020 and ending Spring 2022, and 6.0 percent thereafter. This applies to four-year universities, community colleges and two-year institutions. These long-term tuition and fee increase projections were established for the June 30, 2019 Prepaid529 valuation.

Changes in public education funding that result in tuition increases above VA529's projections would have an immediate, detrimental impact on VA529's outstanding long-term Prepaid529 obligations. With the statutory requirement that institutions provide updated, long-term tuition projections, VA529 remains in a position to be informed of future tuition and fee increases.

In light of these and other issues, in fiscal 2016 VA529 underwent a sustainability study to consider all options for Prepaid529 including maintaining the current program unchanged; maintaining the current program with minimal modifications (single-price model; single-tier pricing); closing Prepaid529 to new enrollment and managing existing contracts through depletion; considering a new structure, such as a weighted average payout program for new contracts; and/or considering a program with some risk sharing among VA529 and Virginia public higher education institutions. The sustainability study was completed and presented to the Board for consideration in October 2016. As a result, VA529's Board approved moving to a single-tier pricing model for the 2016-2017 enrollment period, and directed staff to review the design and implementation of an enrollment-weighted average tuition payout program to supplant the current Prepaid529 program. That study continued during fiscal 2017 and was presented to the Board for consideration in October 2017. The Board approved proceeding with legislation to revise Prepaid529's benefits to an enrollment-weighted average tuition payout structure. Legislation was proposed during the 2018 General Assembly Session and was not adopted but continued to the 2019 Session until it could be studied by the Joint Legislative Audit & Review Commission. The Commission completed its study in November 2018, prior to the 2019 Session. Legislation was proposed and adopted during the 2019 General Assembly Session, authorizing VA529 to proceed with implementation of a new program structure.

The performance of participants' Invest529, CollegeAmerica, ABLEnow, and ABLEAmerica portfolios will depend on many of the same investment factors as those impacting Prepaid529. In the college and disability savings programs the participants, rather than VA529, bear the risk of portfolio declines as a result of the market or other factors.

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# Financial Statements



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VIRGINIA529  
STATEMENT OF NET POSITION  
ENTERPRISE FUND  
As of June 30, 2019

	Administration and Operations	Prepaid529	Total Enterprise
<b>Assets and Deferred Outflows of Resources</b>			
Current assets:			
Cash and cash equivalents (Note 1D and 2)	\$ 3,008,369	\$ 64,600,431	\$ 67,608,800
Interest receivable	—	5,767,806	5,767,806
Prepaid529 contract payments receivable (Note 1F and 9)	—	50,033,900	50,033,900
Pending trade receivables	—	4,540,868	4,540,868
Prepaid and other assets	785,718	—	785,718
Accounts receivable (Note 1G)	10,851,766	1,518,273	12,370,040
Total current assets	<u>14,645,853</u>	<u>126,461,279</u>	<u>141,107,132</u>
Noncurrent assets:			
Investments (Note 1D, 2, 3 and 4)	—	2,746,183,844	2,746,183,844
Other post employment benefits, net (Note 11 and 12)	444,000	—	444,000
Prepaid529 contract payments receivable (Note 1F and 9)	—	159,635,062	159,635,062
Non-depreciable capital assets	423,821	—	423,821
Depreciable capital assets, net (Note 1J and 8)	620,605	—	620,605
Total noncurrent assets	<u>1,488,426</u>	<u>2,905,818,906</u>	<u>2,907,307,333</u>
Total assets	<u>16,134,280</u>	<u>3,032,280,185</u>	<u>3,048,414,464</u>
Deferred Outflows of Resources:			
Pension contributions made after measurement date (Note 10)	1,060,037	—	1,060,037
Pension Related (Note 10)	541,000	—	541,000
Other post employment benefits related (Note 11 and 12)	485,401	—	485,401
Total deferred outflows	<u>2,086,437</u>	<u>—</u>	<u>2,086,437</u>
Total Assets and Deferred Outflows of Resources	<u>18,220,717</u>	<u>3,032,280,185</u>	<u>3,050,500,902</u>
<b>Liabilities and Deferred Inflows of Resources</b>			
Current liabilities:			
Accounts payable	958,883	—	958,883
Pending trades payable	—	11,852,387	11,852,387
Program distributions payable	—	200,383	200,383
Due to program participants (Note 1K)	—	736,277	736,277
Obligations under securities lending (Note 4)	190,242	—	190,242
Tuition benefits payable (Note 7 and 9)	—	283,076,668	283,076,668
Compensated absences (Note 1L and 7B)	715,975	—	715,975
Net other post employment benefits liability (Note 12)	49,695	—	49,695
Total current liabilities	<u>1,914,795</u>	<u>295,865,716</u>	<u>297,780,511</u>
Noncurrent liabilities:			
Tuition benefits payable (Note 7 and 9)	—	1,708,392,294	1,708,392,294
Compensated absences (Note 1L and 7B)	149,332	—	149,332
Net pension liability (Note 10)	10,150,000	—	10,150,000
Net other post employment benefits liability (Note 11 and 12)	2,842,023	—	2,842,023
Total noncurrent liabilities	<u>13,141,355</u>	<u>1,708,392,294</u>	<u>1,721,533,649</u>
Total liabilities	<u>15,056,150</u>	<u>2,004,258,010</u>	<u>2,019,314,160</u>
Deferred inflows of resources:			
Pension Related (Note 10)	879,000	—	879,000
Other post employment benefits related (Note 11 and 12)	879,141	—	879,141
Total deferred inflows	<u>1,758,141</u>	<u>—</u>	<u>1,758,141</u>
Total Liabilities and Deferred Inflows of Resources	<u>16,814,291</u>	<u>2,004,258,010</u>	<u>2,021,072,301</u>
<b>NET POSITION</b>			
Investment in capital assets	1,044,426	—	1,044,426
Restricted for net other post employment asset (Note 12)	362,000	—	362,000
Unrestricted	—	1,028,022,175	1,028,022,175
Total net position	<u>\$ 1,406,426</u>	<u>\$ 1,028,022,175</u>	<u>\$ 1,029,428,601</u>

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

VIRGINIA529  
STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION  
ENTERPRISE FUND  
For the Year Ended June 30, 2019

	Administration and Operations	Prepaid529	Total Enterprise
Operating revenues:			
Charges for sales and services (Note 1C)	\$ 46,689,634	\$ —	\$ 46,689,634
Interest, dividends, rents, and other investment income (net)	435,700	129,324,124	129,759,825
Net increase (decrease) in fair value of investments	1,618	1,365,840	1,367,458
Prepaid529 contract payments (Note 1F)	—	113,180,493	113,180,493
Actuarial Prepaid529 contract payments (Note 9)	—	15,446,536	15,446,536
Other	459	—	459
<b>Total operating revenues</b>	<b>47,127,411</b>	<b>259,316,994</b>	<b>306,444,405</b>
Operating expenses:			
Personal services (Note 10 and Note 11)	11,536,495	—	11,536,495
Actuarial pension expense (Note 10)	829,000	—	829,000
Fiscal and Contractual services	12,724,415	8,763	12,733,177
Supplies and materials	61,773	—	61,773
Depreciation (Note 8)	227,476	—	227,476
Rent, insurance, and other related charges	896,591	—	896,591
Tuition benefits expense	—	175,842,183	175,842,183
Actuarial tuition benefits expense (Note 9)	—	(143,753,464)	(143,753,464)
Expendable equipment	671,529	—	671,529
SOAR Virginia (Note 14)	2,000,000	—	2,000,000
Other	185,491	—	185,491
<b>Total operating expenses</b>	<b>29,132,769</b>	<b>32,097,481</b>	<b>61,230,251</b>
Operating income/loss	17,994,642	227,219,512	245,214,154
Nonoperating Revenues (Expenses)			
Interest expense	(8,210)	—	(8,210)
Loss on disposal of capital asset	(25,823)	—	(25,823)
Operating income/loss before transfers	17,960,609	227,219,512	245,180,121
Transfers:			
Transfers to the General Fund of the Commonwealth	(380,986)	—	(380,986)
Interfund transfer in (out) (Note 1)	(16,936,211)	16,936,211	—
Change in net position	643,412	244,155,723	244,799,135
Net position - July 1, 2018	763,014	783,866,452	784,629,466
Net position - June 30, 2019	<u>\$ 1,406,426</u>	<u>\$1,028,022,175</u>	<u>\$1,029,428,601</u>

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

VIRGINIA529  
STATEMENT OF CASH FLOWS  
ENTERPRISE FUND  
For the Year Ended June 30, 2019

Cash flows from operating activities:	
Receipts for sales and services	\$ 47,706,069
Contributions received	112,990,375
Other operating revenue	459
Payments to suppliers for goods & services	(664,927)
Payments to employees	(12,650,231)
Payments for contractual services	(12,878,441)
Distributions	(177,248,415)
Other operating expenses	(2,185,491)
	<u>(44,930,603)</u>
Net cash provided by (used for) operating activities	
Cash flows from noncapital financing activities:	
Transfer to the General Fund of the Commonwealth	<u>(380,986)</u>
Net cash provided by (used for) noncapital financing activities	
	<u>(380,986)</u>
Cash flows from capital and related financing activities:	
Acquisition of capital assets	<u>(534,710)</u>
Net cash provided by (used for) capital and related financing activities	
	<u>(534,710)</u>
Cash flows from investing activities:	
Purchase of investments	(857,004,474)
Proceeds from sales or maturities of investments	807,441,047
Interest income on cash, cash equivalents, and investments	93,503,952
	<u>43,940,526</u>
Net cash provided by (used for) investing activities	
	<u>43,940,526</u>
Net change in cash and cash equivalents	
	(1,905,774)
Cash and cash equivalents - Beginning	<u>69,324,332</u>
Cash and cash equivalents - Ending	<u><u>67,418,558</u></u>
Reconciliation of cash and cash equivalents:	
Per the Statement of Net Position:	
Cash and cash equivalents	67,608,800
Less:	
Securities lending cash equivalents	<u>(190,242)</u>
Cash and cash equivalents per the Statement of Cash Flows	<u><u>\$ 67,418,558</u></u>

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

VIRGINIA529  
STATEMENT OF CASH FLOWS (continued)  
ENTERPRISE FUND  
For the Year Ended June 30, 2019

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Reconciliation of operating income to net cash provided	
by operating activities:	
Operating income	\$ 245,214,154
Adjustments to reconcile operating income to net cash provided	
by (used for) operating activities:	
Depreciation	227,476
Interest, dividends, rents and other investment income	(129,759,825)
Net increase in fair value of investments	(1,367,458)
Changes in assets, liabilities, and deferred inflows and outflows:	
(Increase) decrease in receivables	826,315
(Increase) decrease in tuition contributions receivable	(15,446,536)
(Increase) decrease in assets	536,080
(Increase) decrease in OPEB asset	(51,000)
Increase (decrease) in deferred outflows	(136,443)
Increase (decrease) in accounts payable	239,101
Increase (decrease) in amounts due to program participants	(1,406,232)
Increase (decrease) in current tuition benefits payable	1,661,499
Increase (decrease) in current compensated absences	38,864
Increase (decrease) in current obligations in net OPEB liability	49,695
Increase (decrease) in noncurrent tuition benefits payable	(145,414,963)
Increase (decrease) in noncurrent compensated absences	54,633
Increase (decrease) in net pension liability	(376,000)
Increase (decrease) in net OPEB liability	65,000
Increase (decrease) in total OPEB liability	(351,194)
Increase (decrease) in deferred inflows	466,231
	<hr/>
Net cash provided by (used for) operating activities	<u>(44,930,603)</u>
Noncash investing, capital, and financing activities:	
Change in fair value of investments	1,367,458
Loss on disposal of capital asset	(25,823)

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

VIRGINIA529  
STATEMENT OF FIDUCIARY NET POSITION  
PRIVATE PURPOSE TRUST FUND  
As of June 30, 2019

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Assets:	
Cash and cash equivalents (Note 1D and 2)	\$ 115,795,051
Receivables:	
Interest and dividends	3,934,742
Accounts receivable	316,215
Pending trades receivable	1,122,217
Investments:	
Certificates of Deposit	66,520,400
Bonds	128,256,395
Mutual funds - Non-Index	752,114,360
Mutual funds - Index	2,724,469,447
Stable Value	1,115,736,967
Equities	87,288,713
Private real estate	117,012,549
Total investments	<u>4,991,398,831</u>
Total Assets	<u>5,112,567,057</u>
Liabilities:	
Accounts payable	368,246
Pending trades payable	2,081,965
Due to program participants (Note 1K)	4,457,894
Program distributions payable	1,992,869
Total liabilities	<u>8,900,974</u>
Net position held in trust for program participants	<u>\$ 5,103,666,084</u>

Amounts may not sum due to rounding

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

VIRGINIA529  
STATEMENT OF CHANGES IN FIDUCIARY NET POSITION  
PRIVATE PURPOSE TRUST FUND  
For the Year Ended June 30, 2019

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ADDITIONS

Contributions:

From participants	\$ 708,609,381
Total contributions	<u>708,609,381</u>

Investment income:

Net increase (decrease) in fair value of investments	83,990,187
Interest, dividends, and other investment income	191,134,456
Total investment income	<u>275,124,643</u>
Less investment expense	(4,692,764)
Net investment income	<u>270,431,879</u>

Total additions	<u>979,041,260</u>
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DEDUCTIONS

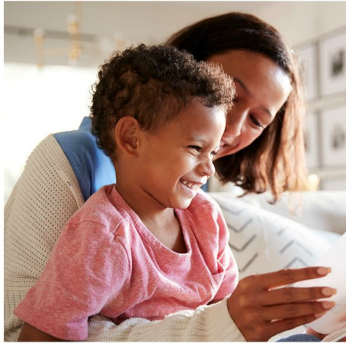
Educational expense benefits	361,583,130
Shares redeemed	33,244,008
Other expenses	2,514,022
Total deductions	<u>397,341,159</u>

Changes in net position	581,700,101
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Net position held in trust for program participants:

Beginning	<u>\$ 4,521,965,983</u>
Ending	<u><u>\$ 5,103,666,084</u></u>

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



# Notes to the Financial Statements



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## 1. Summary of Significant Accounting Policies

The Virginia College Savings Plan (VA529), a body politic and corporate and an independent agency of the Commonwealth of Virginia, was created in 1994 by the Virginia General Assembly, and its enabling legislation is codified at §23.1-700 through §23.1-713 of the *Code of Virginia*, as amended. VA529 operates the Commonwealth's Internal Revenue Code (IRC) §529 qualified tuition plan, which offers three programs, Prepaid529, Invest529, and CollegeAmerica. VA529 also operates the Commonwealth's IRC §529A disability savings plans through the ABLEnow and ABLEAmerica programs.

Prepaid529 is a defined benefit program, which closed to new participants in fiscal 2019. Contracts in this program were based on actuarially determined prices that provide the future payment of undergraduate tuition for the normal full-time course load for students enrolled in a general course of study at any Virginia public higher educational institution and all mandatory fees required as a condition of enrollment of all students. The contract provisions also allow benefits to be used at in-state private or out-of-state institutions with payouts based on earnings and the amounts charged by Virginia's public higher education institutions. Calculations and payouts differ between in-state private and out-of-state institutions. Since inception, over 133,950 accounts have been opened, with 62,514 contracts remaining active at year-end. The program invests contract payments to meet future obligations and had total assets invested of approximately \$2.7 billion as of June 30, 2019.

VA529 completed the final enrollment period of the Prepaid529 program in fiscal 2019, and is now closed to new participants. VA529 will continue to service existing contracts beyond the 2019 fiscal year.

VA529's operating costs are paid from program earnings and other revenue. VA529 does not receive any general fund appropriations. VA529's enabling legislation provides that all moneys remaining in its enterprise fund (a statutorily-created special nonreverting fund) at the end of a biennium shall not revert to the Commonwealth's general fund. Funds remaining may be used to pay VA529's obligations, including those of Prepaid529. VA529 annually assigns net operating revenue to Prepaid529 to support its funded status. Accordingly, net operating revenue of \$16,936,211 was allocated within the enterprise fund to Prepaid529 for fiscal 2019 via an interfund transfer. VA529's assets and income are exempt from federal, state, and local income taxation, except for taxes on unrelated business income. VA529's enabling legislation also provides that a sum sufficient appropriation be included by the Governor in his budget to cover current obligations of VA529, including Prepaid529's contractual obligations, in the event of a funding shortfall.

Invest529 is a defined contribution savings program, which allows participants of all ages to save for qualified higher education expenses, including tuition and fees, at any qualified higher education institution or primary and secondary school by making contributions into the investment portfolio(s) of their choice. Participants are allowed to select from among 21 investment portfolios. Two additional portfolios remain open but are closed to new participants. Invest529 accounts are subject to investment risks, including the possible loss of principal. The Invest529 program is open year round and has no age or residency restrictions. Invest529 began operations in December 1999. The program had 419,911 open accounts since inception and 316,681 accounts remaining active at year end. These accounts had a net position value of approximately \$5.1 billion as of June 30, 2019. Invest529 investment management fees and administrative fees are paid on a pro-rata basis by each account owner and vary according to the portfolio selected. Invest529 accounts provide investors with the same federal and state tax benefits available to participants in the Prepaid529 program.

CollegeAmerica, a broker-sold IRC §529 college savings option, is a defined contribution college savings program and is administered by the American Funds pursuant to a contract using 43 American Funds mutual funds. CollegeWealth is also a defined contribution college savings program under which participants invest in FDIC-insured savings products offered through a participating bank. CollegeWealth was closed to new participants in 2017.

ABLEnow, Virginia's IRC §529A direct-sold savings program, is a defined contribution disability savings program which allows individuals with disabilities to save for qualified disability expenses. ABLEnow is administered by PNC Bank, N.A. with low-cost, target-risk mutual funds as investment options. ABLEAmerica, Virginia's IRC §529A broker-sold savings program, was launched in July 2018 and is administered by the American Funds pursuant to a contract using seven (7) American Funds mutual funds.

These programs are presented as Other Information as the majority of associated investment and record keeping is maintained by the respective partners, not VA529.

An eleven-member governing Board administers VA529, consisting of four ex-officio members and seven non-legislative citizens. Four members are appointed by the Governor, one is appointed by the Senate Committee on Rules, and two are appointed by the Speaker of the House of Delegates. The ex-officio members are the Director of the State Council on Higher Education for Virginia, the Chancellor of the Virginia Community College System, the State Treasurer, and the State Comptroller. The non-legislative citizen members shall have significant experience in finance, accounting, law, or investment management. In order to assist the Board in fulfilling its fiduciary duty with the investment of VA529 assets; and in fulfilling its responsibilities relating to VA529's financial reporting processes and internal and financial controls; the Board has appointed an Investment Advisory Committee (IAC) and Audit and Actuarial Committee (A&AC), respectively. The IAC and A&AC are permanent advisory committees of the Board pursuant to §23.1-702 of the *Code of Virginia*, as amended. The Board has adopted charters that describe the purpose of the committees as well as their duties and responsibilities, composition and conduct of business.

A separate report is prepared for the Commonwealth of Virginia, which includes all agencies, boards, commissions, and authorities over which the Commonwealth exercises, or has the ability to exercise, oversight authority. VA529 is an integral part of the reporting entity of the Commonwealth of Virginia and is included in the Commonwealth's basic financial statements.

The following is a summary of significant accounting policies employed by VA529.

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).

B. Reporting Entity

The accompanying financial statements report the financial position, changes in financial position and cash flows of VA529 as of and for the fiscal year ended June 30, 2019. For financial reporting purposes, VA529 includes all funds and entities over which VA529 is financially accountable and exercises oversight authority. The financial statements of VA529 do not include the assets, liabilities and operations of CollegeAmerica, CollegeWealth, ABLEnow and ABLEAmerica.

C. Measurement Focus, Basis of Accounting, and Financial Statement Presentation

VA529 reports the activity of the Prepaid529 program as an enterprise fund, which is a type of proprietary fund. Enterprise funds typically account for transactions related to resources received and used for financing self-supporting entities that offer products and services for a fee to external users. All operating expenses and revenue collected to support VA529 operations, including administrative fee revenue and expenses of all VA529 college and disability savings programs are reflected in the enterprise fund.

VA529 reports the activity of the Invest529 program as a private-purpose trust fund, which is a type of fiduciary fund. Private-purpose trust funds account for transactions of trust arrangements in which the principal and income benefit individuals, private organizations, or other governments.

The financial statements of the proprietary and fiduciary funds are reported using the economic resources measurement focus and the 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.

Proprietary funds distinguish operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services and/or 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. The principal enterprise fund revenues of VA529 are Prepaid529 contract payments for program participants and investment income. VA529 enterprise fund expenses include tuition benefits expenses.

VA529's operating component is presented in a separate column, providing transparency in reporting operating position and activity. Operating revenues include administrative and other fees received from VA529 programs. Operating expenses include contractual and personal services.

D. Cash Equivalents and Investments

Money market investments of VA529, which are deemed short-term, highly liquid investments, are reported at amortized cost. Long-term investments of VA529 are reported at fair value based upon quoted market prices, except for stable value investments, which are reported at contract value. Cash equivalents are investments with an original maturity of three months or less. Investments are reported on a trade date basis. Nonnegotiable Certificates of Deposits are reported as investments due to their long term original maturity dates. Trade date accounting accurately depicts VA529's financial position as of fiscal year end, as all securities pending settlements at June 30, 2019 are incorporated in the reported values.

VA529 also participated in the Commonwealth's General Account pool, which is managed by the State Treasurer. These pooled investments are valued on an amortized cost basis. VA529 receives no additional distribution of unrealized gains or losses in the fair values of the pool's investments.

E. Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

F. Prepaid529 Contract Payments

Prepaid529 contract purchasers may elect to pay their contract in full via a lump sum payment or over a period of time. Customized financing options are available for purchasers by allowing payments to be spread over a period of time determined by the contract purchaser. However, contracts must be paid in full prior to drawing benefits; therefore the maximum number of years available for those purchasers electing to pay over time is approximately equal to the number of years between the beneficiary's current age and their expected college entrance date. Prepaid529 contract payments receivable represent the actuarially determined present value of future payments due from contract holders.

Approximately 50.92 percent of contract holders of outstanding (active) contracts as of June 30, 2019 had elected to pay over time. Prepaid529 is now closed to new participants.

G. Accounts Receivable

Accounts receivable reflected in VA529's operating column of the enterprise fund reflect amounts due to VA529 at June 30<sup>th</sup> for administrative and other services provided. These amounts include second calendar quarter administrative fees collected on behalf of VA529 for the CollegeAmerica, CollegeWealth and ABLEnow programs.

The American Funds pays VA529 an annual fee equal to ten basis points (.10 percent) of the average daily net asset value of the underlying funds held in CollegeAmerica up to \$20 billion. The fee is reduced to five basis points (.05 percent) for amounts in excess of \$20 billion up to \$100 billion with further reductions above \$100 billion. This fee is calculated and accrued daily and paid to VA529 on a quarterly basis.

CollegeWealth's banking partner, Branch Banking & Trust (BB&T) pays VA529 an annual fee equal to ten basis points (.10 percent) of the average daily assets held in 529 bank accounts under the Program. These fees are calculated, accrued and paid to VA529 on a quarterly basis.

PNC Bank pays VA529 an annual fee equal to ten basis points (.10 percent) of the assets held in the ABLEnow program's investment options. This fee is calculated and accrued daily and paid to VA529 on a quarterly basis.

ABLEAmerica fees have been waived until assets under management reach \$300 million or June 2023; whichever is earlier.

H. Deferred Outflows and Deferred Inflows of Resources

Deferred outflows of resources are a consumption of assets by VA529 that is applicable to a future reporting period. Deferred inflows of resources are an acquisition of assets by VA529 that is applicable to a future reporting period. VA529 reported deferred inflows and outflows for the fiscal year relating to pensions and other post-employment benefits (OPEB) in accordance with GASB Statement Nos. 68 and 75, respectively.

Changes in net pension liability not included in pension expense are reported as deferred outflows of resources or deferred inflows of resources. Changes in net OPEB liability or asset not included in personal services expense are reported as deferred outflows of resources or deferred inflows of resources. Employer contributions subsequent to the measurement date of the liabilities or assets are reported as deferred outflows of resources. For additional information, see Note 10, Retirement and Pension Plan; Note 11, Group Life Insurance Program, Virginia Sickness and Disability Plan and State Employee Health Insurance Credit Program; and Note 12, Healthcare Plan for Pre-Medicare Retirees.

I. Administrative Expenses and Budget

VA529 is an independent state agency that does not receive a general fund appropriation from the Commonwealth of Virginia. However, VA529's operating expenditures, funded with non-general fund revenues, are included in the Commonwealth's Appropriation Acts and accordingly are subject to approval by the General Assembly and the Governor. The Board annually reviews and approves an operating budget. Operating expenses are primarily funded from administrative fee revenue. VA529 prepares and submits a biennial budget to the Commonwealth in compliance with biennial budgetary requirements (cash basis). Also, in accordance with its fiduciary responsibility, the Board reviews a comparison of actual versus budgeted expenses each quarter.

J. Capital Assets

Tangible assets are recorded at cost at the time of acquisition and are reported net of accumulated depreciation. VA529 capitalizes all property, plant, and equipment that have a cost or value greater than \$5,000 and an expected useful life greater than two years. Depreciation is computed on a straight-line basis over the estimated useful life of the property. Intangible assets with a value of \$100,000 or greater are capitalized, except for internally generated software. Internally generated software with a value of \$1,000,000 or greater is capitalized. Intangible assets, if depreciated, are amortized over their useful lives.

Intangible assets are nonfinancial in nature, lack physical substance and have an initial useful life extending beyond a single reporting period. These assets may be acquired by purchase or license, through non-exchange transactions, or internally generated. Intangible assets are also capital assets and adhere to the same policies of other property, plant and equipment. VA529 has two types of intangible assets, purchased and internally generated computer software, which are reported in Note 8, Capital Assets.

K. Amounts Due To Program Participants

Amounts due to program participants reflects accrued amounts due and payable at June 30, 2019 for distributions to other qualified tuition programs, or to participants for cancelled or overpaid prepaid contracts or savings accounts. In the Fiduciary Statement of Net Position, Due to Program Participants also includes contributions received from participants that have yet to settle. These funds are classified as a liability until the settlement process is complete.

L. Accrued Leave Policy

Since January 1, 2016, VA529 has administered a Paid Time Off (PTO) Policy with a defined leave year of January 1 through December 31. VA529 provides a bank of PTO that employees may use at their discretion for absences, including vacation, sick, community service, and various other leave types. The Policy applies to all leave-eligible employees including regular full-time and regular part-time employees.

When the Policy became effective, employees' existing annual leave balances converted to an annual bank up to the maximum carryover amount as dictated by VA529's previous annual leave policy. This bank will be available for employees' use throughout their remaining tenure with VA529 and will pay out upon termination according to the provisions below. While employees may use this time in lieu of or in addition to their PTO, they do not accrue time in the annual bank.

Employees accrue PTO at a rate of 8.3 to 13.3 hours semi-monthly, depending on their length of service. The maximum accumulation within the year is dependent upon years of service, but in no case may it exceed 40 days at the end of the calendar year. Regular part-time employees who retain eligibility for benefits receive a pro-rated accrual of PTO based on the number of regularly scheduled hours and state tenure. Employees may carryover up to 80 hours of unused PTO each year.

Employees are eligible annually for a partial payout of PTO time that was accrued but not used in the previous year. The payout of unused leave will occur automatically after the end of the plan year, by February 1 of the subsequent plan year, provided certain conditions are met as specified in the PTO Policy. Eligible accrued but unused PTO will be paid out at 50 percent of the employee's current salary up to a maximum of three to ten days based on total state tenure. Employees have the option to receive a taxable cash payment or they may defer their payment to their 457(b) deferred compensation retirement account.

All employees leaving the agency are paid for accrued but unused leave up to a maximum limit, not to exceed 36 days for 15-19 years of service and 42 days for 20 or more years of service, at their current earnings rate. Employees having a negative PTO balance must pay VA529 the value of the borrowed leave as described in the PTO Policy.

In conformance with Section C60 of GASB Codification, the monetary value of accumulated leave payable upon termination is included in the accompanying financial statements. The liability at June 30, 2019, was computed using salary rates effective at that date and represents annual bank, PTO bank, overtime and disability credits held by employees up to the allowable ceilings, including the liability for VA529's share of Social Security and Medicare taxes on leave balances for which employees will be compensated.

M. Other Postemployment Benefits

VA529 eligible employees participate in postemployment benefit programs that are sponsored by the Commonwealth and administered by the Virginia Retirement System (VRS). These programs include the Group Life Insurance Program (GLIP), Virginia Sickness and Disability Program (VSDP), and the Retiree Health Insurance Credit Program (HICP). All but one VA529 employee participates in the VSDP.

The GLIP is a multiple-employer, cost-sharing, defined benefit plan that provides members basic group life insurance upon employment. The VSDP is a single employer plan that is presented as a multiple-employer, cost-sharing plan that in addition to sick, family and personal leave and short-term and long-term disability benefits provided to active members during employment, provides inactive members with long-term disability and long-term care benefits. The HICP is a single employer plan that is presented as a multiple-employer, cost-sharing plan that provides member retirees who have at least 15 years of service health insurance credits to offset their monthly health insurance premiums. GLIP, VSDP and HICP benefit payments are recognized when due and payable in accordance with benefit terms and investments are reported at fair value. The GLIP liability, VSDP asset, HICP liability, deferred outflows and inflows of resources are determined on the same basis as reported by VRS. See Note 11 Group Life Insurance Program, Virginia Sickness and Disability

Plan and State Employee Health Insurance Credit Program for additional information on these VRS benefit programs.

VA529 also participates in the postemployment Pre-Medicare Retiree Healthcare Plan (PMRHP), which is sponsored by the Commonwealth and administered by the Department of Human Resources Management (DHRM). The plan provides the option for retirees who are not eligible to participate in Medicare to participate in the Commonwealth's healthcare plan for its active employees. VA529 does not pay a portion of the retirees' healthcare premium because 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, VA529 effectively subsidizes the costs of the participating retirees' healthcare through payment of the employer's portion of premiums for active employees.

The PMRHP is a single-employer defined benefit plan that is presented as a cost-sharing plan. The PMRHP is reported as part of the Commonwealth's Healthcare Internal Service Fund. There are no assets accumulated in a trust to pay benefits. Benefit payments are recognized when due and payable in accordance with the benefit terms. The PMRHP liability, deferred outflows and inflows of resources are determined on the same basis as reported by DHRM. See Note 12 Healthcare Plan for Pre-Medicare Retirees for additional information.

Additional information related to all of these programs or plans is available at the state-wide level in the Commonwealth's Comprehensive Annual Financial Report.

**N. Prepaid529 – Investment in Real Estate**

In 2008, VA529 established Aventura Holdings LLC, a limited liability company, to purchase a 48,500 square foot office building in Chesterfield County, Virginia; such purchase was funded by Prepaid529. The investment in Aventura is reflected in Prepaid529's assets at \$7.85 million as of fiscal year end. The value was determined by a professional real estate appraisal in June 2019.

VA529 is the sole member of Aventura and VA529's Chief Executive Officer, Chief Financial Officer and Chief Administrative Officer are its only non-equity managers. VA529 leases the building from Aventura. A Second Amendment to the Lease was entered into by VA529 for another ten years beginning July 1, 2018, upon the first option lease renewal that expired on June 30, 2018. On July 1, 2018, VA529 and Aventura entered into a 10-year extension of the Lease Agreement through June 30, 2028.

The Lease is carried as an operating lease in the enterprise fund financial statements. See the Commitments Note 6 for a description of the Lease Agreement. Aventura has also established a renewal and replacement reserve funded from the annual rental payments received from VA529 to cover capital improvements to the building.

**O. Pensions**

The Virginia Retirement System's (VRS) State Employee Retirement Plans are single employer pension plans that are treated like cost-sharing plans. For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the VRS State Employee Retirement Plan; and the additions to/deductions from the VRS State Employee Retirement Plan's net fiduciary position have been determined on the same basis as they were reported by VRS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value. See Note 10, Retirement and Pension Plan for additional information.

**2. Cash, Cash Equivalents, and Investments**

VA529's Board has established Statements of Investment Policy and Guidelines for its investment programs in accordance with §23.1-706 of the *Code of Virginia*, as amended. This section of the *Code* requires the Board to discharge its duties in a manner which will provide the investment return and risk level consistent with the actuarial return requirements and cash flow demands of VA529 and conforming

to all statutes governing the investment of VA529 funds. The Board shall exercise the judgment of care under the circumstances then prevailing, which persons of prudence, discretion, and intelligence exercise in the management of their own affairs, not in regard to speculation but to the permanent disposition of funds, considering the probable income as well as the probable safety of their capital when investing funds. In order to meet the return requirements, VA529's portfolio shall be invested in a broadly diversified investment portfolio including, but not limited to, domestic and foreign stocks, bonds, mutual funds, collective trust funds, hedge funds, private equity funds and cash equivalent investments, which are defined as investments with an original maturity of three months or less. The Board's allocation target for the Prepaid529 portfolio, at market value, is 32.5 percent equities, 52.5 percent fixed income, and 15 percent alternatives. The Board's allocation targets for the Invest529 and ABLEnow programs vary according to the investment objective of each portfolio.

To assist the Board in fulfilling its fiduciary duty with the investment of VA529 assets, the Board-appointed IAC provides objective and prudent investment advice on all matters related to the management of investments, within the parameters set by the Board's Statement of Investment Policy and Guidelines and the IAC's Charter. The Board has also selected a group of external managers; complete lists of investment managers are located in Appendices A and B. In addition, Prepaid529 contractual payments are considered Commonwealth revenue and as a result must pass through the State Treasury. Prior to being moved to VA529's custodian, these monies along with other minor balances may be invested with the State Treasurer as part of the Commonwealth's General Account. The Appropriation Act includes a provision for the allocation of interest on balances held at the State Treasury to VA529 and certain other agencies. Accordingly, VA529 received interest earnings on a quarterly basis from the Commonwealth based on its relative participation during the quarter.

Invest529 contributions are excluded as Commonwealth revenue and accordingly are deposited directly with VA529's financial institution, Wells Fargo Bank N.A.

The Board has authorized its partner, the American Funds, to offer a subset of their mutual funds to investors in CollegeAmerica and ABLEAmerica. At fiscal year-end, 43 mutual funds were approved and available for investment through the CollegeAmerica program and seven (7) for ABLEAmerica. The Board has oversight and review authority for the investment activity and operations of the CollegeAmerica and ABLEAmerica programs. The American Funds is required to seek renewed approval of the use of these mutual funds on an annual basis.

The Board has selected and authorized its partner, PNC, to offer three target risk mutual funds and a money market mutual fund to investors in the ABLEnow program.

#### Private Debt & Equity Investment Commitments

In fiscal year 2019, VA529 extended investment commitments under limited partnership agreements for private equity and debt investments in Prepaid529. At June 30, 2019, VA529's investment commitments amounted to \$153 million.

#### Custodial Credit Risk

*Custodial Credit Risk – Deposits:* Custodial credit risk is the risk that in the event of a bank failure, VA529's deposits may not be returned to it. VA529 does not hold deposits for CollegeAmerica, CollegeWealth, ABLEnow, or ABLEAmerica. All deposits of the Prepaid529 and Invest529 programs, except those in the FDIC-Insured Omnibus Account, are secured in accordance with the provisions of the Virginia Security for Public Deposits Act, Section 2.2-4400, of the *Code of Virginia*.

*Custodial Credit Risk – Investments:* For an investment, custodial credit risk is the risk that, in the event of the failure of the counterparty, VA529 will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. At June 30, 2019, all investments of the Prepaid529 and Invest529 programs, except those investments in open-end mutual funds, certain collective trusts, private equity or hedge funds, were held in VA529's name by VA529's custodian, BNY Mellon Asset Servicing. Approximately 66 percent of total Prepaid529 investments and 73 percent of total Invest529 investments are invested in vehicles that are not held in VA529's name by its custodian. All investments of the CollegeAmerica and ABLEAmerica programs are invested in American Funds mutual funds. Investments in open-end mutual funds, collective trusts, private equity and hedge funds are not directly exposed to custodial credit risk because their existence is not evidenced by individual securities held by the custodian.



### Interest Rate Risk – Fixed Income Securities

As of June 30, 2019, VA529 had fixed income investment securities held in Prepaid529 and Invest529 with the following maturities and effective duration. Effective duration is a measure of interest rate and price sensitivity that takes into account options, such as early call provisions, embedded in the securities. It is widely used in the management of fixed income portfolios as it quantifies the risk of interest rate changes.

<b>Prepaid529</b>		
<b>Investment Type</b>	<b>Fair Value</b>	<b>Effective Duration (years)</b>
Money Market Funds	\$ 64,918,375	0.08
Bank Loans	238,555,168	0.11
Non-Agency Mortgage-Backed Securities	34,322,524	2.38
Mortgage-Backed Securities - Agency	30,859,080	1.66
Asset-Backed Securities	43,813,174	0.60
Corporate Bonds	216,394,985	4.06
Convertible Securities <sup>1</sup>	117,440,301	3.26
Bond Funds <sup>1</sup>	578,630,253	4.59
Treasury and Agency Futures Contracts	246,892	6.25
Stable Value <sup>2</sup>	125,733,440	2.96
<b>Total</b>	<b>\$ 1,450,914,194</b>	<b>3.09</b>
<b>Invest529</b>		
<b>Investment Type</b>	<b>Fair Value</b>	<b>Effective Duration (years)</b>
Money Market Funds	\$ 64,675,493	0.08
Bank Loans	3,965,149	0.26
Asset-Backed Securities	10,753,126	0.07
Corporate Bonds	113,538,121	4.01
Bond Funds	1,059,508,071	6.49
Stable Value <sup>2</sup>	1,115,736,968	3.05
<b>Total</b>	<b>\$ 2,368,176,927</b>	<b>4.54</b>

<sup>1</sup>Effective duration for convertible bonds and convertible bond funds is calculated using a methodology that takes into account the duration impact of equity warrants and rate-sensitive instruments. <sup>2</sup>Reported at contract value.

VA529's Statements of Investment Policy and Guidelines do not limit investment maturities as a means 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 percent of each portfolio's designated benchmark.

### Credit Risk of Fixed Income Securities

VA529's Statements of Investment Policy and Guidelines require its fixed income securities managers to invest in holdings which, on average, are comprised of high quality securities and may not include securities deemed to be below investment grade. Investment grade is generally defined as a rating of BBB or above by one of the three major rating agencies. This requirement does not apply to VA529's managers who are instructed to manage a specific investment strategy (e.g., high-yield fixed income), whether in a separate account or as a dedicated allocation within a broader fixed income portfolio. VA529's fixed income investment securities held in Prepaid529 and Invest529 as of June 30, 2019 were rated by Standard & Poor's (S&P) and/or Moody's and the ratings are presented in the charts entitled credit quality by investment type.

### Concentration of Credit Risk

At June 30, 2019, VA529 had no investment securities held in separately managed accounts in Prepaid529 and Invest529 in any one issuer that represented 5 percent or more of total investments.

### Mutual Fund Risks

At June 30, 2019, VA529 participated in a number of open-end domestic and foreign equity and fixed income mutual funds and collective trusts in Prepaid529 and Invest529. These funds are subject to various investment risks, including the possibility that the value of the fund's portfolio holdings may fluctuate

in response to events specific to the companies in which the fund invests, as well as economic, political or social events in the United States and abroad. Certain mutual funds may be subject to additional risks due to investments in a more limited group of sectors and industries than the broad market. Those funds with holdings issued by entities based outside the United States are subject to foreign securities risks, including currency fluctuations.

The value of and the income generated by fixed income securities held by certain mutual funds in which VA529 participates, may be affected by changing interest rates and credit risk assessments. Lower quality or longer maturity bonds may be subject to greater price volatility than higher quality or shorter maturity bonds.

Prospectuses for each of the mutual funds in which VA529 participates may be requested from VA529, 9001 Arboretum Parkway, North Chesterfield, VA 23236, or at [Virginia529.com](http://Virginia529.com). A prospectus may also be requested directly from each of the underlying fund managers. Prospectuses for each CollegeAmerica and ABLEAmerica mutual fund offering may be obtained directly from the American Funds or from a financial adviser. Please see Supplementary and Other Information for a listing of Prepaid529, Invest529, CollegeAmerica, ABLEnow and ABLEAmerica mutual funds.

### Foreign Currency Risk

Foreign currency risk is the risk that changes in currency exchange rates will adversely affect the fair value, in U.S. dollars (USD), of non-USD denominated securities. At June 30, 2019, VA529 had indirect exposure to this risk through its investments in certain mutual funds and other pooled vehicles. More information relating to currency risk in VA529's mutual fund investments can be found in each fund's prospectus.

VA529 has direct exposure to foreign currency risk through investments held in the convertible bonds account managed by Advent Capital Management, LLC. Advent invests in both domestic and international securities and uses currency forward contracts to hedge risks associated with currency fluctuations. The table below shows exposures to non-USD denominated currencies by asset class. A similar exhibit showing non-USD denominated currency exposure associated with the forward contracts is included in Note 3, Investment in Derivative Instruments and Stable Value.

Prepaid529 Foreign Currency Exposures by Asset Class			
Currency	Convertible Bonds	Cash & Cash Equivalents	Total
British Pound Sterling	\$ 1,493,053	—	\$ 1,493,053
Chinese Yuan	1,157,103	—	1,157,103
Euro	19,142,872	\$ 7,546	19,150,418
Hong Kong Dollar	8,571,153	168	8,571,320
Japanese Yen	4,745,338	1,874	4,747,212
Swiss Franc	4,446,800	185,959	4,632,760
<b>Total</b>	<b>\$ 39,556,320</b>	<b>\$ 195,546</b>	<b>\$ 39,751,866</b>

Note: Amounts shown in U.S. dollars using June 30, 2019 foreign exchange rates.

### Counterparty Risk

Counterparty risk is the risk of loss arising from the failure of one party to a transaction to fulfill its contractual obligation to the other. VA529 has exposure to counterparty risk through its investments. Higher levels of this risk are attributable to VA529's investments in hedge funds, as these types of investments are subject to the potential usage of over-the-counter derivative transactions. Other potential examples of risk for over-the-counter transactions may include transaction costs/inefficiencies/errors, fraud or reputation risk. As of June 30, 2019 approximately 5 percent of Prepaid529 investments were invested in these vehicles.

Rating Agency	Invest529 Credit Quality by Investment Type						Nonnegotiable Certificate of Deposits
	Corporate Bonds	Asset-Backed Securities	Bank Loans	Money Market Funds	Bond Funds <sup>2</sup>	Stable Value <sup>3</sup>	
<b>S&amp;P's Quality Rating</b>							
AAA	—	\$ 3,074,811	—	\$ 64,674,691	—	—	—
BBB	\$ 1,524,677	—	—	—	—	—	—
BBB-	5,688,884	—	—	—	—	—	—
BB+	7,870,859	—	—	—	—	—	—
BB	13,667,710	—	\$ 222,499	—	—	—	—
BB-	26,007,077	—	—	—	—	—	—
B+	10,445,544	—	422,762	—	—	—	—
B	18,983,804	—	2,087,174	—	—	—	—
B-	15,159,767	—	790,114	—	—	—	—
Less than B-	11,226,915	—	442,600	—	—	—	—
<b>Moody's Quality Rating</b>							
Aaa	—	7,678,315	—	—	—	—	—
Ba3	1,514,913	—	—	—	—	—	—
B1	378,000	—	—	—	—	—	—
B3	261,500	—	—	—	—	—	—
Unrated <sup>1</sup>	808,472	—	—	803	\$ 1,059,508,071	\$ 1,115,736,968	\$ 66,520,400

<sup>1</sup>Securities have not been rated by either Standard & Poor's or Moody's

<sup>2</sup>Funds are not rated directly by S&P, however the underlying investments weighted average credit quality rating is A+

<sup>3</sup>Stable Value Contracts are not rated directly by S&P, however the underlying investments weighted average credit quality rating is AA

Rating Agency	Prepaid529 Credit Quality by Investment Type									
	Non-Agency Mortgage-Backed Securities	Asset-Backed Securities	Mortgage-Backed Securities - Agency	Bank Loans	Corporate Bonds	Convertibles	Money Market Funds	Bond Funds <sup>2</sup>	Treasury and Agency Futures Contracts	Stable Value <sup>3</sup>
<b>S&amp;P</b>										
AAA	\$ 4,903,753	\$ 12,688,516	\$ 367,371	—	—	—	\$ 45,870,487	—	—	—
AA+	1,937,289	—	28,232,931	—	—	—	—	—	—	—
AA	1,926,372	2,070,765	—	—	—	—	—	—	—	—
A+	844,443	200,526	—	—	—	\$ 3,221,100	—	—	—	—
A	1,276,240	1,611,064	—	\$ 311,332	—	1,876,214	—	—	—	—
A-	687,745	167,984	—	—	—	11,998,272	—	—	—	—
BBB+	275,157	707,214	—	—	—	2,655,270	—	—	—	—
BBB	641,391	—	—	—	\$ 3,035,778	16,071,879	—	—	—	—
BBB-	1,751,794	272,282	—	15,040,541	11,282,808	3,933,646	—	—	—	—
BB+	—	—	—	12,142,847	15,327,153	—	—	—	—	—
BB	286,975	—	—	15,403,014	25,745,782	873,233	—	—	—	—
BB-	1,119,598	—	—	35,267,230	48,799,602	1,690,692	—	—	—	—
B+	—	326,574	—	39,236,032	20,321,230	943,389	—	—	—	—
B	—	—	—	79,014,021	35,143,542	—	—	—	—	—
B-	—	800,784	—	26,134,361	29,816,108	—	—	—	—	—
Less than B-	19,113	1,358,986	—	7,283,669	21,033,990	—	—	—	—	—
<b>Moody's</b>										
Aaa	8,836,643	21,022,365	266,005	—	—	—	18,351,605	—	—	—
Aa1	—	287,302	—	—	—	—	—	—	—	—
Aa3	—	603,572	—	—	—	—	—	—	—	—
A2	—	—	—	—	—	7,432,737	—	—	—	—
A3	279,464	—	—	—	—	4,102,501	—	—	—	—
Baa1	708,708	—	—	—	—	2,924,590	—	—	—	—
Baa2	187,963	—	—	—	—	1,493,053	—	—	—	—
Baa3	547,515	—	—	—	—	2,595,307	—	—	—	—
Ba2	—	—	—	400,000	—	—	—	—	—	—
Ba3	519,782	—	—	528,316	2,807,875	—	—	—	—	—
B1	87,949	—	—	806,908	590,625	—	—	—	—	—
B2	—	—	—	933,233	—	—	—	—	—	—
Less than B2	1,173,120	524,719	—	—	579,063	—	—	—	—	—
<b>Unrated<sup>1</sup></b>	<b>6,311,508</b>	<b>1,170,521</b>	<b>1,992,774</b>	<b>6,053,663</b>	<b>1,911,430</b>	<b>55,628,419</b>	<b>696,284</b>	<b>\$ 578,630,253</b>	<b>\$ 246,892</b>	<b>\$ 125,733,440</b>

<sup>1</sup>Securities have not been rated by either Standard & Poor's or Moody's

<sup>2</sup>Funds are not rated directly by S&P, however the underlying investments weighted average credit quality rating is A

<sup>3</sup>Stable Value Contracts are not rated directly by S&P however the underlying investments weighted average credit quality rating is AA

### 3. Investment Derivative Instruments and Stable Value

GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments*, requires that VA529 disclose its exposure to investment derivative instruments and certain investments described as synthetic guaranteed investment contracts.

#### A) Investment Derivatives:

Pursuant to the Statements of Investment Policy and Guidelines established for VA529's investment programs, investments in derivative securities are prohibited except where specifically permitted in the investment manager agreement for a separate account or prospectus for a fund. The Board may permit managers in certain asset classes to use derivatives consistent with the overall investment guidelines and objectives of that asset class. As of June 30, 2019, three separate account managers were permitted to use derivatives as shown in the table below.

<u>Program</u>	<u>Manager</u>	<u>Asset Class</u>
Prepaid529	PGIM Fixed Income	High-yield Fixed Income
Invest529	PGIM Fixed Income	High-yield Fixed Income
Prepaid529	Schroders Investment Management North America, Inc.	Mortgage-Backed Securities
Prepaid529	Advent Capital Management, LLC	Convertible Fixed Income

#### (i) Derivatives held in PGIM Fixed Income Accounts

Pursuant to its investment management agreement, PGIM Fixed Income may invest in derivatives for hedging, duration and cash management. The portfolio's exposure to derivatives, as measured on a net market value basis, is limited to 10 percent of the market value of the high-yield account. Neither the Invest529 nor Prepaid529 PGIM Fixed Income accounts held any derivatives at June 30, 2019.

#### (ii) Derivatives held in Schroders Investment Management Account

Pursuant to its investment management agreement, Schroders Investment Management may invest in derivatives for hedging, and duration management. The portfolio's notional exposure to derivatives, as measured on a net market value basis, is limited to 10 percent of the market value of the account. U.S. Treasury futures used to hedge duration are excluded from the 10 percent limit. At June 30, 2019, the only derivatives held in the account were U.S. Treasury futures. The following table contains information relating to fair value, changes in fair value and notional value of these derivative instruments. Credit risk is mitigated with these instruments as they are exchange traded.

<u>Investment Derivatives – U.S. Treasury Futures Contracts</u>					
<u>Changes in Fair Value</u>			<u>Fair Value at June 30, 2019</u>		
<u>Classification</u>	<u>Amount</u>	<u>Classification</u>	<u>Amount</u>	<u>Notional Amount</u>	
<b>Enterprise Fund</b>	Revenue	Investment			
	-\$160,616		\$246,892		\$18,246,430

#### (iii) Derivatives held in Advent Capital Management Account

Pursuant to its investment management agreement, Advent Capital Management, LLC 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 contains a breakdown of these forward contracts by currency.

Prepaid529 Foreign Currency Forwards				
Currency	Cost	Foreign Exchange Purchases	Foreign Exchange Sales	Market Value
Swiss Franc	\$ (4,407,569)	—	\$ (4,550,103)	\$ (4,550,103)
British Pound Sterling	(1,493,625)	—	(1,495,116)	(1,495,116)
Euro	(18,917,516)	\$ 245,830	(19,469,738)	(19,223,908)
Hong Kong Dollar	(8,481,610)	—	(8,510,719)	(8,510,719)
Japanese Yen	(4,660,114)	2,571,305	(7,280,706)	(4,709,401)
U.S. Dollar	37,960,434	40,725,561	(2,765,127)	37,960,434
Total	\$ —	\$ 43,542,696	\$ (44,071,509)	\$ (528,813)

Note: Amounts shown in U.S. dollars using June 30, 2019 foreign exchange rates.

#### B) Stable Value:

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. VA529 utilizes stable value investments in both the Prepaid529 and Invest529 programs. VA529's stable value investments meet the definition of fully benefit-responsive synthetic guaranteed investment contracts and are reported at contract value. At June 30, 2019, VA529 had the following stable value investments outstanding in the respective programs as shown in the table below.

Program	Wrap Provider	Notional Amount	Effective Date	Maturity Date	Crediting Rate
Prepaid529	American General Life	\$ 25,116,475	2/21/2014	Open ended	2.35%
	Nationwide Life Insurance	23,928,768	4/19/2018	Open ended	2.50%
	RGA	25,384,467	6/22/2016	Open ended	2.51%
	State Street Bank	25,373,485	5/01/2002	Open ended	2.89%
	Voya Retirement & Annuity	25,930,245	12/03/2002	Open ended	2.88%
Invest529	American General Life	\$ 185,911,555	1/16/2014	Open ended	2.51%
	Nationwide Life Insurance	186,102,888	1/29/2018	Open ended	2.95%
	Prudential Retirement Ins. & Annuity	186,017,916	1/30/2014	Open ended	2.68%
	RGA	185,895,426	8/28/2015	Open ended	2.57%
	State Street Bank	185,903,664	5/01/2002	Open ended	2.58%
	Voya Retirement & Annuity	185,905,517	10/05/2012	Open ended	2.47%

At June 30, 2019, the fair value of the underlying investments for both Prepaid529 and Invest529 was more than the book value (notional amount) of the wrap contracts. The book value of the wrap contracts provides a guaranteed minimum value that program participants would receive upon liquidation, and therefore has a separate fair value only in the circumstance that the fair value of the associated underlying investment pool is below the book value of the wrap contracts. The fair value of the wrap contracts is the amount required to bring the total value of the stable value investments up to the book value of the wrap contracts.

In the Prepaid529 program, the fair value of the wrapped stable value investments at June 30, 2019, was \$127,845,307.

<u>Prepaid529 - Stable Value Components</u>	<u>Fair Value</u>
Underlying Investments	\$ 127,845,307
Wrap Contracts	—
Total	<u>\$ 127,845,307</u>

In the Invest529 program, the fair value of the wrapped stable value investments at June 30, 2019, was \$1,131,010,497.

<u>Invest529 - Stable Value Components</u>	<u>Fair Value</u>
Underlying Investments	\$ 1,131,010,497
Wrap Contracts	—
Total	<u>\$ 1,131,010,497</u>

#### 4. Fair Value Measurement and Application

GASB Statement No. 72, *Fair Value Measurement and Application*, establishes a framework for measuring fair value. That framework provides a fair value hierarchy that prioritizes inputs of valuation techniques used to determine fair value. The hierarchy gives highest priority to valuations maximizing observable inputs and lowest priority to those utilizing unobservable inputs. The three levels of the fair value hierarchy are described below:

**Level 1:** Quoted prices in active markets for identical assets or liabilities

**Level 2:** Quoted prices for similar assets or liabilities, quoted prices for identical or similar assets or liabilities in markets that are not active or inputs other than quoted prices that are observable for the asset or liability

**Level 3:** Unobservable inputs

GASB Statement No. 72 also permits certain investments that do not have a readily determinable fair value to be reported at the investment's Net Asset Value (NAV). These investments are excluded from the fair value hierarchy above and accordingly are reported in a separate table. The following exhibits represent VA529's investments and related disclosures in accordance with GASB Statement No. 72 by program.

#### Prepaid529 investments measured at fair value as of June 30, 2019:

<u>Prepaid529 Investments By Fair Value Level</u>	<u>Fair Value</u>	<u>Fair Value Measurements Using:</u>		
		<u>Quoted Prices in Active Markets for Identical Assets (Level 1)</u>	<u>Significant Other Observable Inputs (Level 2)</u>	<u>Significant Unobservable Inputs (Level 3)</u>
Debt Securities				
US Treasury & Agency Securities	\$ 246,892	\$ 246,892	—	—
Corporate Bonds	216,394,985	—	\$ 216,394,985	—
Convertible Bonds	117,440,301	—	117,440,301	—
Bond Funds	82,667,307	82,667,307	—	—
Bank Loans	238,555,168	—	238,555,168	—
Asset-Backed Securities	43,813,174	—	43,813,174	—
Mortgage-Backed - Agency	30,859,080	—	30,859,080	—
Mortgage-Backed - Non Agency	34,322,524	—	34,322,524	—
Total Debt Securities	<u>764,299,431</u>	<u>82,914,199</u>	<u>681,385,232</u>	<u>—</u>
Equity Securities				
Equities	236,424,953	229,881,047	6,543,905	—
Equity Real Estate	7,850,000	—	—	\$ 7,850,000
Index Funds - Equity	172,679,650	172,679,650	—	—
International & Emerging Markets Funds	432,836,819	432,836,819	—	—
Total Equity Securities	<u>849,791,422</u>	<u>835,397,517</u>	<u>6,543,905</u>	<u>7,850,000</u>
Total Investments by Fair Value Level	<u>\$ 1,614,090,853</u>	<u>\$ 918,311,716</u>	<u>\$ 687,929,137</u>	<u>\$ 7,850,000</u>

Note: Cash equivalent investments, in the amount of \$65,103,804, that are measured at amortized cost are not classified in the fair value hierarchy and as a result, are not included in the above table.

**Description of Prepaid529 investments measured at fair value:**

1. Debt and equity securities classified in level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Debt securities classified in level 2 of the fair value hierarchy utilize dealer quotes for similar securities traded in active markets. VA529's investment in real estate as the sole member of Aventura Holdings, LLC. is classified as a level 3 investment. The property value is determined annually at fiscal year-end by an independent real estate appraiser. The appraisal takes into account the comparable sales, cost and income approach in determining value.
2. Stable Value investments are held at contract value and are accordingly excluded from this exhibit.

**Prepaid529 investments measured at NAV:**

Investments Measured at the NAV	Fair Value	Unfunded Commitments	Redemption Frequency (if Currently Eligible)	Redemption Notice Period
<b>Hedge Funds</b>				
Blackstone - Hedge Fund of Funds	\$ 137,872,844	—	Semi-Annual	95 Days
<b>Equity Real Estate</b>				
UBS Realty Investors	51,406,178	—	Quarterly	60 Days
<b>Private Debt &amp; Private Equity Funds of Funds</b>				
Golub Capital	21,000,000	\$ 14,000,000		
Private Advisors	35,536,824	8,883,039		
Adams Street Partners	146,640,728	66,085,900		
LGT Capital Partners	4,268,127	6,480,000		
Neuberger Berman	19,921,883	14,804,135		
Aether Investment Partners	26,651,767	21,847,986		
Commonfund	18,380,883	2,670,000		
Horsley Bridge Partners	1,296,593	18,552,000		
<b>Common Trust Funds &amp; Other</b>				
Wellington Management	198,293,954	—	Monthly	10 Days
State Street Global Advisors	135,366,937	—	Daily	2 Days
Ferox Capital	78,144,011	—	Daily	2 Days
BlackRock	84,158,043	—	Daily	3 Days
Sands Capital	47,420,778	—	Monthly	10 Days
Total Investments Measured at the NAV	<u>\$ 1,006,359,550</u>			

**Description of Prepaid529 investments measured at NAV:**

1. **Hedge Funds:** This investment type includes two hedge funds. The Blackstone Partners Offshore Fund is a diversified, multi-strategy hedge funds 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.
2. **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 VA529's ownership of the partnership.



3. **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 3<sup>rd</sup> through 15<sup>th</sup> years. Secondaries funds of funds may have an accelerated capital call and return of capital profile. VA529 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 VA529's ownership of the partnership, adjusted for cash flows (capital calls) through June 30, 2019. The following table provides information for this investment type by investment manager, fund name and underlying investments.

Investment Manager	Fund Name(s)	Invests In
Adams Street Partners	Multiple U.S./Non-U.S. Centric Buyout Funds	Emerging Markets U.S.and Non-U.S. Developed Markets Funds
Adams Street Partners	Venture Innovation Funds I & II	Venture
Commonfund	Capital Natural Resources Fund IX, LP	Natural Resources
Aether Investment Partners, LLC	Real Assets III & IV, LP Funds	Natural Resources
Private Advisors, LLC	Multiple small company buyout/private equity funds	U.S. small company growth equity/ buyout, distressed and turnaround, and opportunistic funds
LGT Capital Partners	Crown Global Secondaries Fund IV, plc	Private equity secondaries (Global)
Neuberger Berman	Crossroads Fund XXI - Asset Allocation, LP	Asset allocation fund of funds; diversified geographically and strategically
Horsely Bridge Partners	XII Growth Buyout, LP	U.S. small company buyout (Growth)
Golub Capital	Golub Capital Partners 11, LP	Private Debt - U.S. middle markets, senior secured, low / floating rate loans

4. **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. The following table provides information for this investment type by investment manager, fund name and underlying investments.

Investment Manager	Fund Name(s)	Invests In
State Street Global Advisors	U.S. Treasury Inflation Protected Securities Index Non-Lending Common Trust Fund	Securities or other pooled vehicles in order to track performance of the Barclays Capital U.S. Treasury Inflation Protected Securities Index
Wellington Management Co., LLP	Emerging Market Debt Common Trust Fund	Securities, derivatives, private placements or other pooled vehicles in order to generate excess returns over the J.P. Morgan Emerging Markets Bond Index Plus.
BlackRock, Inc.	Intermediate Term Credit Core Bond Index Non-Lendable Fund "B"	The index fund seeks to approximate the total rate of return of the Barclays Intermediate Credit Bond Index, which consists of credit bonds with maturities between one and ten years.
Sands Capital Management	Sands Capital Emerging Markets Growth Feeder Fund (DE), L.P.	The fund seeks to invest in only long emerging market equity securities with a focus on growth.
Ferox Capital, LLP	Salar Fund PLC	A UCITS compliant Dublin, Ireland based Public Limited Company with an investment strategy in long-only global convertible bonds

**Description of Invest529 investments measured at fair value:**

1. Debt and equity securities classified in level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Debt securities classified in level 2 of the fair value hierarchy utilize dealer quotes for similar securities traded in active markets.
2. Stable Value investments are held at contract value and are thus excluded from this exhibit.

**Invest529 investments measured at fair value as of June 30, 2019:**

Investments By Fair Value Level	Fair Value	Fair Value Measurements Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
<b>Debt Securities</b>				
Corporate Bonds	\$ 113,538,121	—	\$ 113,538,121	—
Bank Loans	3,965,149	—	3,965,149	—
Asset Backed Securities	10,753,126	—	10,753,126	—
Emerging Markets - Debt	243,664,815	\$ 243,664,815	—	—
Index Funds - Debt	815,843,255	815,843,255	—	—
Total Debt Securities	<u>1,187,764,466</u>	<u>1,059,508,071</u>	<u>128,256,395</u>	<u>—</u>
<b>Equity Securities</b>				
Equities	87,288,713	87,288,713	—	—
Equity Real Estate	105,510,190	105,510,190	—	—
Index Funds - Equity	1,803,116,001	1,803,116,001	—	—
Equity Funds	73,346,161	73,346,161	—	—
International & Emerging Markets Funds	435,103,383	435,103,383	—	—
Total Equity Securities	<u>2,504,364,449</u>	<u>2,504,364,449</u>	<u>—</u>	<u>—</u>
<b>Total Investments by Fair Value Level</b>	<u>\$ 3,692,128,915</u>	<u>\$ 3,563,872,520</u>	<u>\$ 128,256,395</u>	<u>—</u>

Note: Cash equivalent investments, in the amount of \$64,675,493, that are measured at amortized cost are not classified in the fair value hierarchy and as a result, are not included in the above table.

**Invest529 investments measured at NAV:**

Investments Measured at the NAV	Fair Value	Unfunded Commitments	Redemption Frequency (if Currently Eligible)	Redemption Notice Period
<b>Equity Real Estate</b>				
UBS Realty Investors	\$ 69,317,767	—	Quarterly	60 Days
Blackstone Property Partners	47,694,782	—	Quarterly	90 Days
<b>Total Investments Measured at the NAV</b>	<b>\$ 117,012,549</b>			

**Description of Invest529 investments measured at NAV:**

**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 VA529's ownership of the partnership.

**5. Securities Lending Transactions**

As of June 30, 2019, there were \$190,242 in investments and cash equivalents held by the Treasurer of Virginia that represent VA529's allocated share of cash collateral received and reinvested and securities received for the State Treasury's securities lending program. The Treasurer of Virginia is authorized to enter into securities lending transactions – loans of securities to broker-dealers and other entities for collateral with a simultaneous agreement to return the collateral for the same securities in the future – for a fee. The Commonwealth's policy is to record unrealized gains and losses on the State Treasury's securities lending program in the General Fund in the Commonwealth's basic financial statements. When gains or losses are realized, the actual gains and losses are recorded by the affected agencies. Accordingly, VA529 recorded interest of \$500 for securities lending transactions in fiscal year 2019. Information related to the State Treasury's securities lending program is available on a statewide level in the Commonwealth of Virginia's Comprehensive Annual Financial Report found at <https://www.doa.virginia.gov/> by selecting "Reports" and "Comprehensive Annual Financial Report".

**6. Commitments**

VA529 is committed under operating leases for business equipment, single office space rental, and VA529's headquarters office building. The equipment lease is for a three-year term. The single office space rental is for one year, automatically renewing each year. In all cases, VA529 expects that in the normal course of business, these leases will be renewed or replaced by similar leases.

The total rental expense for the equipment and single office space was \$680,808 for the fiscal year ended 2019. As of June 30, 2019, VA529 had the following total future minimum rental payments due under these leases.

Fiscal Year	
2020	\$ 148,017
2021	85,137
2022	23,410
2023	16,487
2024	16,487
Total future minimum rental payments*	<u>\$ 289,539</u>

\* Total does not include operating lease payments for the Arboretum Building referenced below

On July 1, 2018, VA529 entered into a 10-year extension of its Lease Agreement with Aventura Holdings, LLC under which it leases the 48,500 square foot headquarters office building through June 30, 2028.

Pursuant to the Lease, VA529 will make base rent payments as reflected below on an annual basis in advance, and will make additional rent payments on a quarterly basis in advance in an amount sufficient to pay building operating costs for the next quarter. Aventura has entered into an agreement with a property management company for the purpose of providing facilities maintenance, grounds keeping, custodial services, etc. The additional rent payments will cover operating costs incurred by Aventura under the property management agreement. At the end of each quarter, VA529 and Aventura reconcile expenses before funding operating expenses for the subsequent quarter.

Base Rent Periods	Annual Base Rent
2020	\$ 669,235
2021	685,966
2022	703,115
2023	720,693
2024	738,711
Thereafter	3,144,194
Total Arboretum future minimum rental payments	<u>\$ 6,661,914</u>

Aventura has also established a renewal and replacement reserve funded from a portion of the annual rental payments received from VA529 to cover capital improvements to the building. The total reserve funding expense for the fiscal year ending 2019 was \$97,937. The reserve funding schedule is set forth below.

Base Reserve Periods	Annual Reserve Funding
2020	\$ 100,385
2021	102,895
2022	105,467
2023	108,104
2024	110,807
Thereafter	471,630
Total Arboretum future reserve funding	<u>\$ 999,288</u>

## 7. Long-Term Liabilities

Long-term liabilities include tuition benefits payable and compensated absences.

### A. Tuition Benefits Payable

This liability represents the actuarially determined present value of future obligations anticipated for payment of benefits and administrative expenses for Prepaid529.

### B. Compensated Absences

Compensated Absences represent the long-term liability for accrued annual, sick or disability credits, compensatory, overtime, on-call, and other leave for all leave-eligible employees employed on June 25, 2019. Long-term leave liability is further apportioned as current or noncurrent based on whether they are estimated to be due within one year or due greater than one year, respectively.

Changes in long-term liabilities are shown below:

	Beginning Balance	Increases	Decreases	Ending Balance	Due Within One Year
Compensated Absences	\$ 771,810	\$ 760,054	\$ 666,557	\$ 865,307	\$ 715,975
Tuition Benefits Payable	2,135,222,426	32,088,719	175,842,183	1,991,468,962	283,076,668
<b>Total</b>	<b>\$ 2,135,994,236</b>	<b>\$ 32,848,773</b>	<b>\$176,508,740</b>	<b>\$ 1,992,334,269</b>	<b>\$ 283,792,643</b>

## 8. Capital Assets

The following schedule presents capital asset activity of VA529 for the year ended June 30, 2019.

Enterprise Fund	Balance			Balance June 30, 2019
	July 1, 2018	Increases	Decreases	
Non - Depreciable capital assets:				
Infrastructure - Software	\$ —	\$ 423,821	\$ —	\$ 423,821
	—	423,821	—	423,821
Depreciable capital assets:				
Equipment	1,827,966	110,889	161,876	1,776,979
Software	1,038,466	—	26,400	1,012,066
Total Depreciable capital assets:	2,866,432	110,889	188,276	2,789,045
Less accumulated depreciation for:				
Equipment	1,400,561	123,629	138,473	1,385,717
Software	702,855	103,847	23,980	782,721
Total accumulated depreciation	2,103,416	227,476	162,453	2,168,439
Net depreciable capital assets	763,014	(116,586)	25,823	620,605
Total net capital assets	\$ 763,014	\$ 307,235	\$ 25,823	\$ 1,044,426

## 9. Summary of Actuarial Assumptions and Methods

VA529's statute requires that it annually determine the actuarial soundness of Prepaid529. VA529 has assumed that actuarially sound, when applied to Prepaid529, means that VA529 has sufficient assets (including the value of future installment payments due under current Prepaid529 contracts) to cover the actuarially estimated value of the tuition obligations under those contracts, including any administrative costs associated with those contracts.

The two most significant assumptions used to prepare Prepaid529's actuarial valuation report and contract pricing are the rates of investment return and future tuition growth. In addition, there are other assumptions the actuary employs in the actuarial valuation and contract pricing. In the summer of 2019, VA529's Board reviewed the rates of investment return and future tuition growth assumptions and the long-term investment return assumption remained at 5.75 percent. The Board reduced the future tuition growth assumption for four-year universities from 6.50 to 4.0 percent and also reduced the future tuition growth assumption for two-year institutions and community colleges from 6.0 to 4.0 percent. The following assumptions were used in the actuarial valuation for June 30, 2019:

**Investment Rate of Return:** 5.75 percent per annum.

**Projected Tuition Increase:** The assumed tuition increase rates used in the current year's valuation are outlined in the table below.

	Universities	Community Colleges
Fall 2020	4.0%	4.0%
Fall 2021	4.0%	4.0%
Fall 2022 and thereafter	6.0%	6.0%

**Cancellations, Rollovers and Transfers:** It is assumed that 0.5 percent of contracts will be cancelled, etc. each year for beneficiaries ages 0 through 17. It is assumed that 5.0 percent of contracts will be cancelled, etc. each year for beneficiaries ages 18 and higher.

**Attendance and Bias:** It is assumed that of the remaining contracts that will be redeemed to pay for tuition, 76 percent of beneficiaries will attend a public university in Virginia, 7.6 percent will attend a private university in Virginia, 11.4 percent will attend a university in another state, and 5 percent will request a cancellation, transfer, or rollover to a savings plan. Weighted average tuition for four-year public universities and two-year community colleges in Virginia was adjusted with 8 percent and 1 percent loads, respectively, to add a bias for attendance at more expensive schools. The highest tuition for a public university in Virginia was assumed to be 176 percent of weighted average tuition. Out-of-state students are assumed to receive a benefit equal to the payments made on the contract plus interest at the composite reasonable rate of return.

**Utilization:** It is assumed that participants will begin utilizing their contract at actuarially determined rates, and then redeem up to two semesters of tuition per year until the contract is depleted. While some participants redeem contracts and utilize benefits in the year of expected matriculation, many delay redeeming units until later years.

**Expenses:** The expenses included in the present value of future obligations are those relating to Annual Maintenance Expense per Contract of \$62.56 and Annual Distribution Cost per Contract in Payment Status of \$27.70. These expenses were developed by VA529 staff and are assumed to increase annually at the rate of inflation plus 0.5 percent.

The actuarial Prepaid529 contract payments and the actuarial tuition benefits expense line items represent the annual accrual of contract payments receivable and the obligation for distribution expenses determined by the actuarial valuation. At June 30, 2019, the accrual of the actuarially determined Prepaid529 contract payments receivable increased over the prior year. The increase in the receivable resulted in positive actuarial Prepaid529 contract payments reported as a increase in operating revenue. The accrual of the tuition benefits payable decreased over the prior year. The decrease in the payable resulted in a decrease in actuarial Prepaid529 tuition benefit expenses.

	2019	2018	Change
Prepaid529 contract payments receivable	\$ 209,668,962	\$ 194,222,426	\$ 15,446,536
Tuition benefits payable	\$ 1,991,468,962	\$ 2,135,222,426	\$ (143,753,464)

## 10. Retirement and Pension Plan

### Eligibility

VA529 employees are employees of the Commonwealth of Virginia. VA529 employees participate in one of two defined benefit pension plans or a hybrid retirement plan all of which are administered by the Virginia Retirement System (VRS or System). The first defined benefit plan (Plan 1) includes members who became eligible for VRS prior to July 1, 2010 and vested as of January 1, 2013. Otherwise, Plan 1 is a closed plan. Plan 2 is a defined benefit plan for employees who became eligible on or after July 1, 2010 or whose membership date was before July 1, 2010 but they were not vested as of January 1, 2013. The hybrid retirement plan combines the features of a defined benefit plan and a defined contribution plan and is open to members hired on or after January 1, 2014, as well as other members who were eligible and opted into this plan. Eligibility is determined by the *Code of Virginia*, as may be amended from time to time. In addition, certain members are eligible for an optional retirement plan (ORP), having service under Plans 1 or 2 and are not eligible to elect the hybrid retirement plan option.

### Benefits provided

Plans 1 and 2's members are eligible for benefits based on a formula adjusting for age, creditable service and average final compensation. The hybrid retirement plan contains a similar formula to the defined benefit plans, but incorporates a defined contribution component (DC). The DC element depends on the member and VA529's contributions made to the plan and the investment performance of those contributions, net of any required fees.

Various adjustments to benefit provisions based on Plan are detailed in the VRS annual report found at <https://www.varetire.org>, clicking on "Publications" and "Comprehensive Annual Financial Report."

### Contributions

In general, employees contribute 5 percent (5%) of their compensation each month through a pre-tax salary reduction. VA529 contributes to VRS based on an actuarial determination only for members of Plan 1. For the hybrid retirement plan, mandatory employee contributions are based on a percentage of creditable compensation and matched by VA529. Members may choose to make additional voluntary contributions to the plan and VA529 is required to match those contributions according to specified percentages.

Contribution formulas for active employees are also provided in the *Code of Virginia*, as amended, but may be adjusted based on funding provided by the General Assembly. For the year ended June 30, 2019, the contribution rate was 13.52 % of compensation, based on an actuarial valuation as of June 30, 2017. Contributions to VRS totaled \$1,060,037 for the fiscal year.

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

As of June 30, 2019, VA529 reported a liability of \$10,150,000 for its proportionate share of the VRS Net Pension Liability (NPL). The NPL was measured as of June 30, 2018 and the total pension liability used to calculate the NPL was determined by an actuarial valuation as of that date. VA529's proportion of the NPL was based on a projection of VA529's actuarially-determined long-term share of contributions to the pension plan for the year ended June 30, 2018 relative to the projected contributions of all participating employers and the State. At June 30, 2018, VA529's proportion of the VRS State Employee Retirement Plan was 0.18750 percent as compared to 0.18062 percent at June 30, 2017.

For the year ended June 30, 2019, VA529 recognized pension expense of \$829,000 for the VRS. Due to the change in proportionate share from June 30, 2017 to June 30, 2018, a portion of the pension expense relates to deferred amounts from changes in proportion and differences between VA529's contributions and the proportionate share of employer contributions expected to be amortized in future years.

At June 30, 2019, VA529 reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ —	\$ 614,000
Net difference between projected and actual earnings on pension plan investments	—	265,000
Change in assumptions	68,000	—
Changes in proportion and differences between Employer contributions and proportionate share of contributions	473,000	—
Employer contributions subsequent to the measurement date	1,060,037	—
Total	<u>\$ 1,601,037</u>	<u>\$ 879,000</u>

VA529 reported \$1,060,037 as deferred outflows of resources related to pensions resulting from contributions subsequent to the measurement date, which will be recognized as a reduction of the NPL in the year ended June 30, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Fiscal Year ended June 30	Pension Expense
2020	\$ 103,000
2021	(32,000)
2022	(381,000)
2023	(28,000)
2024	—

#### Actuarial Assumptions

The total pension liability in VRS' actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

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

Mortality rates were based on:

#### Pre-Retirement:

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

#### Post-Retirement:

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

#### Post-Disablement:

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



The actuarial assumptions used in the June 30, 2017 valuation were based on the results of an actuarial experience study for the period July 1, 2012 through June 30, 2016. The following adjustments were made as a result of the Study:

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

### Long-Term Expected Rate of Return

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan 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 allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class (Strategy)	Target Allocation	Arithmetic Long-Term Expected Rate of Return	Weighted Average Long-Term Expected Rate of Return
Public Equity	40.00%	4.54%	1.82%
Fixed Income	15.00%	0.69%	0.10%
Credit Strategies	15.00%	3.96%	0.59%
Real Estate	15.00%	5.76%	0.86%
Private Equity	15.00%	9.53%	1.43%
Total	<u>100.00%</u>		<u>4.80%</u>
		Inflation	<u>2.50%</u>
		Expected arithmetic nominal return	<u>7.30%</u>

### Discount Rate

The discount rate used to measure the total pension liability was 7.00 percent. The projection of cash flows used to determine the discount rate assumed that VRS contributions will be made per the *Code of Virginia* from employers including VA529 at rates equal to the difference between the actuarially determined contributions rates adopted by VRS and the member rate. Through the fiscal year ended June 30, 2018, a portion of the rates will be funded by an appropriation from the Commonwealth. From July 1, 2018 on, the discount rate assumes 100 percent funding by all employers. VRS's fiduciary net position is projected to be available to make all projected future benefit payments for current active and inactive employees. Therefore, the long-term expected rate of return was applied to all periods of projected benefit payments to determine the liability.

### Sensitivity of VA529's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate

The following presents VA529's proportionate share of the NPL using the discount rate of 7.00 percent, as well as what VA529's proportionate share of the NPL would be if it were calculated using a discount rate that is one percentage point lower (6.00 percent) or one percentage point higher (8.00 percent) than the current rate:

	1.00% Decrease (6.00%)	Current Discount Rate (7.00%)	1.00% Increase (8.00%)
VA529's proportionate share of the VRS State Employee Retirement Plan Net Pension Liability	\$ 15,368,000	\$ 10,150,000	\$ 5,758,000

### Pension Plan Fiduciary Net Position

Detailed information about the VRS's fiduciary net position is available in the separately issued VRS Comprehensive Annual Financial Report found at <https://www.varetire.org>.

### Payables to the Pension Plan

As of June 30, 2019, VA529 reported payables to VRS in the amount of \$63,210. This amount is comprised of payments due to the VRS that were not made until after the fiscal year end through the normal course of business.

## 11. Group Life Insurance Program, Virginia Sickness and Disability Plan and State Employee Health Insurance Credit Program

### Eligibility and Plan Descriptions

VA529 employees are employees of the Commonwealth of Virginia and are eligible for programs provided separately from the Virginia Retirement System's (VRS's) pension plans but administered by the VRS. The VRS administers the Group Life Insurance Program (GLIP), Disability Insurance Program (Virginia Sickness and Disability Program or VSDP) and the State Employee Health Insurance Credit Program (HICP).

Details as to eligibility, the benefit provisions, and contribution requirements for each of these programs may be found in the VRS annual report found at <https://www.varetire.org>. The programs and eligibility for each are summarized below.

**Group Life Insurance Program:** VA529's full-time, salaried, permanent employees are automatically covered by the GLIP. The GLIP is a defined benefit plan that provides a basic group life insurance benefit. In addition to the basic group life insurance benefit, members are also eligible to elect additional coverage for themselves as well as a spouse or dependent children through the Optional Group Life Insurance Program, which is a separate and fully insured program, and it is not included as part of the GLIP.

**Virginia Sickness and Disability Program:** VA529's full-time and part-time, salaried, permanent employees hired on or after January 1, 1999 are automatically covered by the VSDP. The VSDP also covers state employees hired before January 1, 1999 who elected to transfer to VSDP rather than retain their eligibility to be considered for disability retirement. All but one of VA529's employees participate in the VSDP. The VSDP is a managed care program that provides sick, family and personal leave and short-term and long-term disability benefits for non-work-related and work-related disabilities.

**State Employee Health Insurance Credit Program:** VA529's full-time, salaried, permanent employees are automatically covered by the HICP. The HICP is a defined benefit plan that provides a credit toward the cost of health insurance coverage for retired state employees who retire with at least 15 years of service credit. Employees earn one month of service credit toward the benefit for each month they are employed and for which their employer pays contributions to VRS. The health insurance credit is a tax-free reimbursement in an amount set by the General Assembly for each year of service credit against qualified health insurance

premiums retirees pay for single coverage, excluding any portion covering the spouse or dependents. The credit cannot exceed the amount of the premiums and ends upon the retiree's death.

### Benefits

Benefits for each of the programs include as follows:

GLIP	VSDP	HICP
The benefits payable under the GLIP include natural death and accidental death benefits and additional benefits provided under specific circumstances. The benefit amounts provided to members are subject to a reduction factor. The benefit amount reduces by 25 percent on January 1 following one calendar year of separation. The benefit amount reduces by an additional 25 percent on each subsequent January 1 until it reaches 25 percent of its original value. For covered members with at least 30 years of creditable service, there is a minimum benefit payable under the GLIP of \$8,000. This amount is increased annually based on a cost-of-living adjustment and is currently \$8,279.	Leave and short-term disability benefits under the VSDP are paid by the employer. The short-term and long-term disability benefits include income replacement up to certain levels and for certain time periods based on the employee's disability period and length of service. Long-term disability and long-term care benefits are paid from the VSDP. Depending on the type of long-term benefit received, the employee's benefit or creditable compensation may be increased annually by an amount recommended by VRS's actuary and approved by the VRS Board.	The monthly benefit payable to retired VA529 employees under the HICP is \$4.00 per year of service per month with no cap on the benefit amount. For VA529 employees who retire on disability or go on long-term disability under the Virginia Sickness and Disability Program, the monthly benefit is \$120.00 or \$4.00 per year of service, whichever is higher.

### Contributions

The contribution requirements for the GLIP, VSDP and HICP are governed by the *Code of Virginia*, as amended, but may be impacted as a result of funding provided by the General Assembly. Contribution provisions are summarized as follows:

GLIP	VSDP	HICP
The total rate for the GLIP was 1.31 percent of covered employee compensation. This was allocated into an employee and an employer component using a 60/40 split. The employee component was 0.79 percent (1.31 percent X 60 percent) and the employer component was 0.52 percent (1.31 percent X 40 percent). Employers may elect to pay all or part of the employee contribution, however the employer must pay all of the employer contribution. VA529's contractually required employer contribution rate for the year ended June 30, 2019 was 0.52 percent of covered employee compensation based on an actuarially determined rate from an actuarial valuation as of June 30, 2017. VA529's contributions were \$108,148 and \$101,528 for the years ended June 30, 2019 and June 30, 2018, respectively.	VA529's contractually required contribution rate for the VSDP for the year ended June 30, 2019 was 0.62 percent of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2017. 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. VA529's contributions to the VSDP were \$50,863 and \$50,835 for the years ended June 30, 2019 and June 30, 2018, respectively.	VA529's contractually required contribution rate for the year ended June 30, 2019 was 1.17% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2017. The actuarially determined rate was expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. VA529's contributions were \$96,591 and \$91,582 for the years ended June 30, 2019 and June 30, 2018, respectively.

### GLIP OPEB Liabilities, GLIP OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to the GLIP OPEB

At June 30, 2019, VA529 reported a liability \$624,000 for its proportionate share of the VRS Net GLIP OPEB Liability. The Net GLIP OPEB Liability was measured as of June 30, 2018 and the total GLIP OPEB liability used to calculate the Net GLIP OPEB Liability was determined by an actuarial valuation as of that date. VA529's proportion of the Net GLIP OPEB Liability was based on VA529's actuarially determined employer contributions to the GLIP for the year ended June 30, 2018 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2018, VA529's proportion 0.04111% as compared to 0.03944% at June 30, 2017.

For the year ended June 30, 2019, VA529 recognized GLIP OPEB expense of \$9,000. Since there was a change in proportionate share between measurement dates, a portion of the GLIP OPEB expense was related to deferred amounts from changes in proportion.

At June 30, 2019, VA529 reported deferred outflows of resources and deferred inflows of resources related to the GLIP OPEB from the following sources:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between expected and actual experience	\$ 31,000	\$ 12,000
Net difference between projected and actual earnings on GLIP OPEB program investments	—	20,000
Change in assumptions	—	26,000
Changes in proportion	29,000	—
VA529 contributions subsequent to the measurement date	108,148	—
Total	<u>\$ 168,148</u>	<u>\$ 58,000</u>

VA529 reported \$108,148 of deferred outflows of resources related to the GLIP OPEB resulting from contributions subsequent to the measurement date, which will be recognized as a reduction of the Net GLIP OPEB Liability in the fiscal year ended June 30, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the GLIP OPEB will be recognized in the GLIP OPEB expense in future years as follows:

<b>Fiscal Year ended June 30</b>	<b>GLIP OPEB Expense</b>
2020	\$ (4,000)
2021	(4,000)
2022	(4,000)
2023	2,000
2024	7,000
Thereafter	5,000

### VSDP OPEB Liabilities, VSDP Net OPEB Assets, VSDP OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to the VSDP OPEB

At June 30, 2019, VA529 reported an asset of \$444,000 for its proportionate share of the Net VSDP OPEB Asset. The Net VSDP OPEB Asset was measured as of June 30, 2018 and the total VSDP OPEB liability used to calculate the Net VSDP OPEB Asset was determined by an actuarial valuation as of that date. VA529's proportion of the Net VSDP OPEB Asset was based on VA529's actuarially determined employer contributions to the VSDP OPEB plan for the year ended June 30, 2018 relative to the total of the actuarially

determined employer contributions for all participating employers. At June 30, 2018, VA529's proportion was 0.19690 percent as compared to 0.19152 percent at June 30, 2017.

For the year ended June 30, 2019, VA529 recognized VSDP OPEB expense of \$22,000. Since there was a change in proportionate share between measurement dates, a portion of the VSDP OPEB expense was related to deferred amounts from changes in proportion.

At June 30, 2019, VA529 reported deferred outflows of resources and deferred inflows of resources related to the VSDP OPEB from the following sources:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between expected and actual experience	\$ —	\$ 19,000
Net difference between projected and actual earnings on VSDP OPEB plan investments	—	26,000
Change in assumptions	—	26,000
Changes in proportion	—	11,000
VA529 contributions subsequent to the measurement date	50,863	—
Total	<u>\$ 50,863</u>	<u>\$ 82,000</u>

VA529 reported \$50,863 as deferred outflows of resources related to the VSDP OPEB resulting from contributions subsequent to the measurement date, which will be recognized as an adjustment of the Net VSDP OPEB Asset in the fiscal year ended June 30, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the VSDP OPEB will be recognized in VSDP OPEB expense in future years as follows:

<b>Fiscal Year ended June 30</b>	<b>VSDP OPEB Expense</b>
2020	\$ (18,000)
2021	(18,000)
2022	(18,000)
2023	(9,000)
2024	(8,000)
Thereafter	(11,000)

#### HICP OPEB Liabilities, HICP OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to HICP OPEB

At June 30, 2019, VA529 reported a liability of \$1,059,000 for its proportionate share of the VRS HICP Net OPEB Liability. The Net HICP OPEB Liability was measured as of June 30, 2018 and the total HICP OPEB liability used to calculate the Net HICP OPEB Liability was determined by an actuarial valuation as of that date. VA529's proportion of the Net HICP OPEB Liability was based on VA529's actuarially determined employer contributions to the HICP OPEB plan for the year ended June 30, 2018 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2018, VA529's proportion of the HICP was 0.11609 percent as compared to 0.11259 percent at June 30, 2017.

For the year ended June 30, 2019, VA529 recognized HICP OPEB expense of \$97,000. Since there was a change in proportionate share between June 30, 2017 and June 30, 2018 a portion of the HICP Net OPEB expense was related to deferred amounts from changes in proportion.

At June 30, 2019, VA529 reported deferred outflows of resources and deferred inflows of resources related to the HICP OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 1,000	\$ —
Net difference between projected and actual earnings on State HICP OPEB plan investments	—	2,000
Change in assumptions	—	10,000
Changes in proportionate share	33,000	—
VA529 contributions subsequent to the measurement date	96,591	—
<b>Total</b>	<b>\$ 130,591</b>	<b>\$ 12,000</b>

VA529 reported \$96,591 as deferred outflows of resources related to the HICP OPEB resulting from VA529's contributions subsequent to the measurement date, which will be recognized as a reduction of the Net HICP OPEB Liability in the fiscal year ended June 30, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the HICP OPEB will be recognized in the HICP OPEB expense in future years as follows:

Fiscal Year ended June 30	HICP OPEB Expense
2020	\$ 4,000
2021	4,000
2022	4,000
2023	3,000
2024	5,000
Thereafter	2,000

#### Actuarial Assumptions

The various total OPEB liabilities were based on an actuarial valuation for all programs as of June 30, 2017, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2018:

Assumptions	Provisions
Inflation	2.5 percent
Salary increases, including inflation (General state employees only)	3.5 percent – 5.35 percent
Investment rate of return	7.0 Percent, net of investment expenses, including inflation
Mortality rates:	
Pre-Retirement	RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with Scale BB to 2020; males set back 1 year, 85 percent of rates; females set back 1 year.
Post-Retirement	RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with Scale BB to 2020; males set forward 1 year; females set back 1 year with 1.5 percent increase compounded from ages 70 to 85.
Post-Disablement	RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males 115 percent of rates; females 130 percent of rates.

The actuarial assumptions used in the June 30, 2017 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016. Changes to the actuarial assumptions as a result of the experience study are as follows:

Assumptions	Changes
Mortality Rates (Pre-retirement, post retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement from 70 to 75
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Adjusted rates to better match experience
Line of Duty Disability	Increased rate from 14 percent to 25 percent

#### Long-Term Expected Rate of Return

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

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

#### Discount Rate

The discount rate used to measure the various total OPEB liabilities was 7.00 percent, determined as follows:

Program	Method
GLIP	Projection of cash flows used to determine the discount rate assumed that member contributions will be made per the VRS guidance and the employer contributions will be made at rates equal to the difference between actuarially determined contribution rates adopted by VRS and the member rate.
VSDP	Projection of cash flows used to determine the discount rate assumed that employer contributions will be made per VRS guidance and that they will be made in accordance with the VRS funding policy and at rates equal to the actuarially determined contribution rates adopted by VRS.
HICP	Projection of cash flows used to determine the discount rate assumed that employer contributions will be made in accordance with VRS guidance at rates equal to the actuarially determined contribution rates adopted by VRS.

Through the fiscal year ending June 30, 2018, a portion of the rates for each of the programs was funded by an appropriation from the Commonwealth. From July 1, 2018, all agencies are assumed to continue to contribute 100 percent of the actuarially determined contribution rates. VRS's fiduciary net position is projected to be available to make all projected future benefit payments for eligible employees. Therefore the long-term expected rate of return was applied to all periods of projected benefit payments to determine the respective liability.

#### Sensitivity of VA529's Proportionate Share of the Net OPEB Liabilities (Asset) to Changes in the Discount Rate

The following table presents VA529's proportionate share of the net GLIP OPEB liability, net VSDP OPEB asset and net HICP OPEB liability using the discount rate of 7.00 percent, as well as what VA529's proportionate share of the net GLIP OPEB liability, net VSDP OPEB asset, and net HICP OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (6.00 percent) or one percentage point higher (8.00 percent) than the current rate:

VA529's proportionate share of the VRS:	1.00% Decrease (6.00%)	Current Discount Rate (7.00%)	1.00% Increase (8.00%)
GLIP Net OPEB Liability	\$ 816,000	\$ 624,000	\$ 468,000
VSDP Net OPEB Asset	\$ (428,000)	\$ (444,000)	\$ (458,000)
HICP Net OPEB Liability	\$ 1,172,000	\$ 1,059,000	\$ 963,000



### GLIP, VSDP and HICP Fiduciary Net Position

Detailed information about the VRS GLIP, VSDP and HICP's fiduciary net positions is available in the separately issued VRS Comprehensive Annual Financial Report found at <https://www.varetire.org>.

### Payables to the VRS GLIP, VSDP and HICP

As of June 30, 2019, VA529 reported payables to VRS in the amount of \$6,512 for GLIP. This amount is comprised of payments due to the VRS that were not made until after the fiscal year end through the normal course of business.

As of June 30, 2019, VA529 reported payables to VRS in the amount of \$3,064 for VSDP. This amount is comprised of payments due to the VRS that were not made until after the fiscal year end through the normal course of business.

As of June 30, 2019, VA529 reported payables to VRS in the amount of \$5,816 for HICP. This amount is comprised of payments due to the VRS that were not made until after the fiscal year end through the normal course of business.

## 12. Healthcare Plan for Pre-Medicare Retirees

### Eligibility and Plan Description

VA529 employees who retire from state service and receive VRS monthly benefits or periodic benefits from another qualified vendor, and who are not eligible to participate in Medicare because of their age, are eligible to participate in the Pre-Medicare Retiree Healthcare Plan (PMRHP) administered by the Commonwealth's Department of Human Resource Management (DHRM). For a retiree to participate in the Plan, the participant must be eligible for a monthly annuity from the VRS or a periodic benefit from one of the qualified Optional Retirement Plan (ORP) vendors, and:

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

### Benefits

VA529 effectively subsidizes the costs of the participating retirees' healthcare through payment of its portion of the premiums for active employees.

### Contributions

VA529 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.

### Total OPEB Liability, OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources

At June 30, 2019, VA529 reported \$1,208,717 as VA529's proportionate share of the PMRHP's Total OPEB liability. The PMRHP OPEB liability was measured as of June 30, 2018 and was determined by an actuarial valuation as of June 30, 2018. VA529's proportionate amount of the PMRHP OPEB liability was based on each employer's healthcare premium contributions as a percentage of the total employer's healthcare premium contributions for all participating employers. At June 30, 2018, VA529's proportion was 0.12019 percent as compared to 0.11627 percent at June 30, 2017.

For the year ended June 30, 2019, VA529 recognized PMRHP OPEB expense of 39,954.

At June 30, 2019, VA529 reported deferred outflows of resources and deferred inflows of resources related to PMRHP OPEB comprised of the following elements:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between expected and actual experience	\$ —	\$ 243,712
Change in assumptions	—	483,429
Change in proportion	86,103	—
Subtotal	<u>86,103</u>	<u>727,141</u>
VA529 contributions subsequent to the measurement date	96,591	N/A
<b>Total</b>	<u><u>\$ 182,694</u></u>	<u><u>\$ 727,141</u></u>

VA529 reported \$96,591 as deferred outflows of resources related to PMRHP OPEB resulting from amounts associated with transactions subsequent to the measurement date, which will be recognized as a reduction of the total OPEB liability during the fiscal year ended June 30, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the PMRHP OPEB will be recognized as part of PMRHP OPEB expense in future years as follows:

<b>Fiscal Year Ended June 30</b>	<b>PMRHP OPEB Expense</b>
2020	\$ (133,056)
2021	(133,056)
2022	(133,056)
2023	(133,056)
2024	(95,914)
Thereafter	(12,898)

#### Actuarial Assumptions and Discount Rate

The Total PMRHP OPEB liability was based on an actuarial valuation with a valuation date of June 30, 2018, using the Entry Age Normal actuarial cost method and the following assumptions. DHRM selected the economic, demographic and healthcare claim cost assumptions. DHRM's actuary provided guidance with respect to these assumptions.

Assumptions –PMRHP	Provisions – PMRHP
Valuation Date	Actuarially determined contribution rates are calculated as of June 30, one year prior to the end of the fiscal year in which contributions are reported.
Measurement Date	June 30, 2018 (one year prior to the end of the fiscal year)
Amortization Method	Level dollar, Closed.
Effective Amortization Period	6.19 years
Discount Rate	3.87%. The discount rate was based on The Bond Buyer's GO 20 Municipal Bond Index as of the measurement date which is June 30, 2018.
Projected Salary Increases	4%
Medical Trend Under 65	Medical and prescription drugs: 8.21% to 5.00% Dental: 4.00% Before reflecting excise tax in federal law as of the valuation date.
Year of Ultimate Trend	2025
Mortality:	Mortality rates vary by participant status (below).
Pre-Retirement:	RP-2014 Employee Rates projected with Scale BB to 2020; males setback 1 year, 85% of rates; females setback 1 year.
Post-Retirement:	RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with Scale BB to 2020; males and females setback 1 year.
Post-Disablement:	RP-2014 Disabled Mortality Rates projected with Scale BB to 2020; males 115% of rates; females 130% of rates.

#### Changes of Assumptions

The following assumptions were updated since the July 1, 2017 valuation based recent experience:

- Spousal Coverage - reduced the rate from 50 percent to 35 percent
- Retiree Participation - reduced the rate from 70 percent to 60 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 3.58 percent to 3.87 percent based on the Bond Buyers GO 20 Municipal Bond Index.

#### Sensitivity of VA529's Proportionate Share of the Total OPEB Liability to Changes in the Discount Rate and Healthcare Cost Trend Rates

The following presents VA529's proportionate share of the PMRHP OPEB liability using the discount rate of 3.87 percent, as well as what VA529's proportionate share of the PMRHP OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (2.87 percent) or one percentage point higher (4.87 percent) than the current rate:

	1.00% Decrease (2.87%)	Current Discount Rate (3.87%)	1.00% Increase (4.87%)
VA529's proportionate share of the total PMRHP liability	\$ 1,293,294	\$ 1,208,717	\$ 1,128,292

The following presents VA529's proportionate share of the PMRHP OPEB liability using a healthcare cost trend rate of 8.21 percent decreasing to 5 percent, as well as what VA529's proportionate share of the PMRHP OPEB liability would be if it were calculated using a healthcare cost trend rate that is one percentage point lower (7.21 percent decreasing to 4.0 percent) or one percentage point higher (9.21 percent decreasing to 6.0 percent) than the current rate:

	1.00% Decrease from Initial Rate of 8.21% decreasing to 5.00% (7.21% - 4.00%)	Current Healthcare Cost Trend Rate (8.21% - 5.00%)	1.00% Increase from Initial Rate of 8.21% decreasing to 5.00% (9.21%- 6.00%)
VA529's proportionate share of the total PMRHP liability	\$1,078,098	\$1,208,717	\$1,362,252

### Payables to the PMRHP

As of June 30, 2019, VA529 reported payables to DHRM in the amount of \$89,875 for medical and hospitalization insurance premiums, which includes its proportionate share for PMRHP. This amount is comprised of payments due to the VRS that were not made until after the fiscal year end through the normal course of business

Detailed information about the Commonwealth's PMRHP is available in the separately issued Commonwealth's Comprehensive Annual Financial Report found at <https://www.doa.virginia.gov>.

### 13. Risk Management

VA529 is exposed to various risks of loss related to torts; theft or, damage to, and destruction of assets; errors and omissions; non-performance of duty; injuries to employees; and natural disasters. VA529 participates in insurance plans maintained by the Commonwealth of Virginia. The state employee health care and worker's compensation plans are administered by the Department of Human Resource Management and the risk management insurance plans are administered by the Department of Treasury, Division of Risk Management. Risk management insurance includes property, general liability, faithful performance of duty bond, automobile, and airplanes. VA529 pays premiums to each of these Departments for its insurance coverage. Information relating to the Commonwealth's insurance plans is available at the statewide level in the Commonwealth of Virginia's Comprehensive Annual Financial Report.

VA529's information technology disaster recovery site is provided through a co-location agreement. The co-location has a fully equipped network environment as well as multiple direct-access internet feeds necessary to facilitate recovery of mission critical VA529 systems. VA529 also has co-location agreements in place to provide alternate office space for periods of one business day to four weeks in the event that VA529 no longer has access to its primary office facilities.

### 14. SOAR Virginia

SOAR Virginia® is an early commitment scholarship program created to inspire and assist high school students to reach their post-secondary education goals. To participate, eligible students pledge to meet program requirements. In return, participating students receive a range of assistance and accumulate scholarship support up to \$2,000 to apply toward their post-secondary education expenses. SOAR Virginia is a unique program created by VA529 to further its mission to make college more affordable and accessible to all Virginians and is offered in partnership with local Virginia college access providers.

VA529's Board has funded an Invest529 account in the name of VA529 for the program. Amounts deposited, plus earnings thereon, remain in the account until distributed. Amounts are allocated to students once awarded pursuant to program rules. VA529 will not commit support in excess of amounts on-hand in the SOAR Virginia account. As of June 30, 2019, the SOAR Virginia account had a balance of \$11.6 million. During fiscal year 2019, \$560,099 was distributed to institutions on behalf of SOAR participants. Details as to the number of students enrolled in the program and amounts committed as of June 30, 2019 are shown below.

Number of Students Enrolled <sup>(1)</sup>	Award Amounts Allocated to Enrolled Students	Additional Awards Enrolled Students May Receive	Total SOAR Commitment
5,287	\$6,052,383	\$2,527,750	\$8,580,133

(1) Number of students that have completed a SOAR application and pledge, and have been admitted to and are currently enrolled in the program

### 15. Scholarship Program And Promotional Accounts

The VA529 scholarship program consists of Prepaid529 and Invest529 third party scholarship accounts (excluding SOAR Virginia) established to provide a range of benefits to future beneficiaries. The purpose of the program is to enable individuals, organizations, community groups, corporations, and trusts to make qualified charitable contributions, which are used to purchase Prepaid529 and Invest529 accounts for beneficiaries. VA529's scholarship program's mission is to work with community partners to make the dream of college a reality for deserving youth in Virginia.

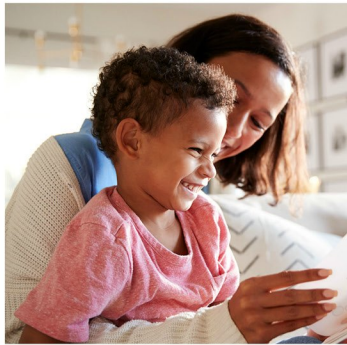
In addition to scholarship accounts, VA529 awards Prepaid529 or Invest529 promotional accounts that do not specifically qualify as scholarships as defined by federal law. Like scholarship accounts, these accounts are funded by VA529, individuals, organizations, school groups, or other entities.

Active scholarship (excluding SOAR) and promotional accounts at June 30, 2019:

Program	Scholarship		Promotional	
	Accounts	Value	Accounts	Value
<b>Invest529</b>	240	\$828,519	196	\$1,102,959
<b>Prepaid529</b>	20	\$305,312	14	\$184,135
<small>Prepaid529 value represents the cancellation value of accounts at June 30, 2019  Invest529 value represents the aggregate market value of the investments in the portfolios at June 30, 2019</small>				

### 16. Unrelated Business Income Tax

As a qualified tuition program under IRC §529, VA529 is subject to tax on unrelated business income. VA529 invests in certain agreements and funds that may produce unrelated business income. As such, VA529 may pay taxes on unrelated business income. During fiscal year 2019 VA529 paid no taxes as there was no reportable unrelated business income during the prior fiscal year. VA529 will determine and pay its unrelated business income tax liability, if any, for fiscal 2019 after it receives all Schedule K-1s at the end of calendar 2019.



## Required Supplementary Information



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## VA529 Pension Liability

## Schedule of VA529's Share of Net Pension Liability

## VRS State Employee Retirement Plan

For the Measurement Dates of June 30, 2018, 2017, 2016, 2015 and 2014\*

	2018	2017	2016	2015	2014
VA529's Proportion of the Net Pension Liability (Asset)	0.18750%	0.18062%	0.17742%	0.17215%	0.15817%
VA529's Proportionate Share of the Net Pension Liability (Asset)	\$ 10,150,000	\$ 10,526,000	\$ 11,693,000	\$ 10,540,000	\$ 8,855,000
VA529's Covered Payroll	\$ 7,816,602	\$ 7,274,947	\$ 7,018,667	\$ 6,633,764	\$ 6,108,107
VA529's Proportionate Share of the Net Pension Liability (Asset) as a Percentage of its Covered Payroll	129.85%	144.69%	166.60%	158.88%	144.97%
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	77.39%	75.33%	71.29%	72.81%	74.28%

*Schedule is intended to show information for 10 years. Since 2018 is the fifth year for this presentation, only five years available. However, additional years will be included as they become available.*



Schedule of VA529 Contributions					
VRS State Employee Retirement Plan					
For the Years Ended June 30, 2010 through 2019					
Date	Contributions in Relation to			Contributions	
	Contractually Required Contribution (1)	Contractually Required Contribution (2)	Contribution Deficiency (Excess) (3)	Employer's Covered Payroll (4)	as a % of Covered Payroll (5)
2019	\$ 1,117,852	\$ 1,117,852	\$ —	\$ 8,268,139	13.52 %
2018	\$ 1,054,460	\$ 1,054,460	\$ —	\$ 7,816,602	13.49 %
2017	\$ 981,390	\$ 981,390	\$ —	\$ 7,274,947	13.49 %
2016	\$ 981,917	\$ 981,917	\$ —	\$ 7,018,667	13.99 %
2015	\$ 817,943	\$ 817,943	\$ —	\$ 6,633,764	12.33 %
2014	\$ 535,070	\$ 535,070	\$ —	\$ 6,108,107	8.76 %
2013	\$ 497,646	\$ 497,646	\$ —	\$ 5,680,894	8.76 %
2012	\$ 178,017	\$ 178,017	\$ —	\$ 5,533,440	3.22 %
2011	\$ 109,800	\$ 109,800	\$ —	\$ 5,154,926	2.13 %
2010	\$ 238,675	\$ 238,675	\$ —	\$ 4,847,401	4.92 %

**Notes to Required Supplementary Information  
State Retirement Employment Plan**

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

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

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

## VA529 OPEB Liability

**Schedule of VA529's Share of Net OPEB Liability  
Group Life Insurance Program (GLIP)  
For the Measurement Dates of June 30, 2018 and 2017**

	<b>2018</b>	<b>2017</b>
VA529's Proportion of the Net GLIP OPEB Liability (Asset)	0.041111%	0.039444%
VA529's Proportionate Share of the Net GLIP OPEB Liability (Asset)	\$ 624,000	\$ 593,000
VA529's Covered Payroll	\$ 7,816,602	\$ 7,274,947
VA529's Proportionate Share of the Net GLIP OPEB Liability (Asset) as a Percentage of its Covered Payroll	7.98%	8.15%
Plan Fiduciary Net Position as a Percentage of the Total GLIP OPEB Liability	51.22%	48.86%

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

**Schedule of VA529 Contributions - GLIP  
For the Years Ended June 30, 2010 through 2019**

Date	Contributions in Relation to			Employer's Covered Payroll (4)	Contributions as a % of Covered Payroll (5)
	Contractually Required Contribution (1)	Contractually Required Contribution (2)	Contribution Deficiency (Excess) (3)		
2019	\$ 42,994	\$ 42,994	\$ —	\$ 8,268,139	0.52%
2018	\$ 40,646	\$ 40,646	\$ —	\$ 7,816,602	0.52%
2017	\$ 37,830	\$ 37,830	\$ —	\$ 7,274,947	0.52%
2016	\$ 33,690	\$ 33,690	\$ —	\$ 7,018,667	0.48%
2015	\$ 31,842	\$ 31,842	\$ —	\$ 6,633,764	0.48%
2014	\$ 29,358	\$ 29,358	\$ —	\$ 6,116,156	0.48%
2013	\$ 27,652	\$ 27,652	\$ —	\$ 5,760,844	0.48%
2012	\$ 17,250	\$ 17,250	\$ —	\$ 5,545,378	0.31%
2011	\$ 14,455	\$ 14,455	\$ —	\$ 5,162,540	0.28%
2010	\$ 9,753	\$ 9,753	\$ —	\$ 3,612,086	0.27%

**Schedule of VA529's Share of Net OPEB Liability  
Health Insurance Credit Program (HICP)  
For the Measurement Dates of June 30, 2018 and 2017**

	2018	2017
VA529's Proportion of the Net HICP OPEB Liability (Asset)	0.11609%	0.11259%
VA529's Proportionate Share of the Net HICP OPEB Liability (Asset)	\$ 1,059,000	\$ 1,025,000
VA529's Covered Payroll	\$ 7,816,602	\$ 7,274,947
VA529's Proportionate Share of the Net HICP OPEB Liability (Asset) as a Percentage of its Covered Payroll	13.55%	14.09%
Plan Fiduciary Net Position as a Percentage of the Total HICP OPEB Liability	9.51%	8.03%

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

**Schedule of VA529 Contributions - HICP  
For the Years Ended June 30, 2010 through 2019**

Date	Contributions in Relation to			Employer's Covered Payroll (4)	Contributions as a % of Covered Payroll (5)
	Contractually Required Contribution (1)	Contractually Required Contribution (2)	Contribution Deficiency (Excess) (3)		
2019	\$ 96,737	\$ 96,737	\$ —	\$ 8,268,139	1.17%
2018	\$ 92,236	\$ 92,236	\$ —	\$ 7,816,602	1.18%
2017	\$ 85,844	\$ 85,844	\$ —	\$ 7,274,947	1.18%
2016	\$ 73,696	\$ 73,696	\$ —	\$ 7,018,667	1.05%
2015	\$ 69,655	\$ 69,655	\$ —	\$ 6,633,764	1.05%
2014	\$ 61,081	\$ 61,081	\$ —	\$ 6,108,107	1.00%
2013	\$ 56,861	\$ 56,861	\$ —	\$ 5,686,134	1.00%
2012	\$ 7,606	\$ 7,606	\$ —	\$ 5,534,040	0.14%
2011	\$ 5,156	\$ 5,156	\$ —	\$ 5,155,840	0.10%
2010	\$ 38,128	\$ 38,128	\$ —	\$ 3,812,767	1.00%

**Schedule of VA529's Share of Net OPEB Liability  
Virginia Sickness and Disability Program (VSDP)  
For the Measurement Dates of June 30, 2018 and 2017**

	2018	2017
VA529's Proportion of the Net VSDP OPEB Liability (Asset)	0.19690 %	0.19152 %
VA529's Proportionate Share of the Net VSDP OPEB Liability (Asset)	\$ (444,000)	\$ (393,000)
VA529's Covered Payroll	\$ 7,765,006	\$ 7,225,108
VA529's Proportionate Share of the Net VSDP OPEB Liability (Asset) as a Percentage of its Covered Payroll	(5.72)%	(5.44)%
Plan Fiduciary Net Position as a Percentage of the Total VSDP OPEB Liability	194.74 %	186.63 %

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

**Schedule of VA529 Contributions - VSDP  
For the Years Ended June 30, 2010 through 2019**

Date	Contractually Required Contribution (1)	Contributions in Relation to Contractually Required Contribution (2)	Contribution Deficiency (Excess) (3)	Employer's Covered Payroll (4)	Contributions as a % of Covered Payroll (5)
2019	\$ 50,941	\$ 50,941	\$ —	\$ 8,216,289	0.62%
2018	\$ 51,249	\$ 51,249	\$ —	\$ 7,765,006	0.66%
2017	\$ 47,686	\$ 47,686	\$ —	\$ 7,225,108	0.66%
2016	\$ 45,996	\$ 45,996	\$ —	\$ 6,969,031	0.66%
2015	\$ 43,462	\$ 43,462	\$ —	\$ 6,585,143	0.66%
2014	\$ 28,481	\$ 28,481	\$ —	\$ 6,059,746	0.47%
2013	\$ 26,554	\$ 26,554	\$ —	\$ 5,649,843	0.47%
2012	\$ 1,537	\$ 1,537	\$ —	\$ 5,545,618	0.03%
2011	\$ —	\$ —	\$ —	\$ 5,162,591	—%
2010	\$ 38,226	\$ 38,226	\$ —	\$ 3,822,557	1.00%

**Notes to Required Supplementary Information  
Commonwealth of Virginia GLIP, VSDP, and HICP**

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

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

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

**Schedule of VA529's Share of Total OPEB Liability  
Pre-Medicare Retirees  
For the Measurement Dates of June 30, 2018 and 2017**

	<b>2018</b>	<b>2017</b>
VA529's proportion of the collective total OPEB liability	0.12019%	0.11627%
VA529's proportionate share of the collective total OPEB liability	\$ 1,208,717	\$ 1,510,217
VA529's covered-employee payroll	\$ 7,816,602	\$ 7,274,947
VA529's proportionate share of the collective total OPEB liability as a percentage of its covered-employee payroll	15.46%	20.76%

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

**Notes to Required Supplementary Information  
Commonwealth of Virginia State Health Plans Program  
for Pre-Medicare Retirees**

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

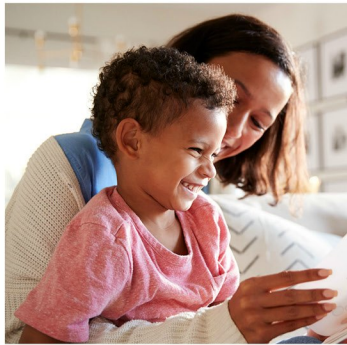
**Changes of benefit terms** – There have been no changes to the benefit provisions since the prior actuarial valuation.

**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% to 35%
- Retiree Participation - reduced the rate from 70% to 60%

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 3.58% to 3.87% based on the Bond Buyers GO 20 Municipal Bond Index.

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## Supplementary Information

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## ADDITIONAL FINANCIAL INFORMATION

**The following schedules provide additional information not included in the Basic Financial Statements:**

- Appendix A - Mutual Funds by Program
- Appendix B - Separate Accounts, Commingled Funds & Alternative Managers by Program
- Appendix C - Investment Details by Program
- Appendix D - Schedule of Investment Expenses

## APPENDIX A

## Mutual Funds by Program

Prepaid529<sup>SM</sup>

<b>Investment Manager</b>	<b>Fund Name</b>
Aberdeen Asset Management, Inc.	Emerging Market Equity Fund
Capital Research & Management Co.	American Funds EuroPacific Growth Fund
Dimensional Fund Advisors, LP	Emerging Markets Core Equity
Dreyfus Cash Investment Strategies	Dreyfus Cash Management
Stone Harbor Investment Partners LP	Emerging Market Debt Blend
Templeton Institutional Funds, Inc.	TIF International Equity Series
The Vanguard Group, Inc.	Institutional Index Fund

Invest529<sup>SM</sup>

<b>Investment Manager</b>	<b>Fund Name</b>
Aberdeen Asset Management, Inc.	Emerging Market Equity Fund
Capital Research & Management Co.	American Funds EuroPacific Growth Fund
Capital Research & Management Co.	SMALLCAP World Fund
Dimensional Fund Advisors, LP	Emerging Markets Core Equity
Parnassus Investments	Core Equity Fund
Stone Harbor Investment Partners LP	Emerging Markets Debt Fund
Templeton Institutional Funds, Inc.	Templeton International Equity Series
The Vanguard Group, Inc.	Institutional Index Fund
The Vanguard Group, Inc.	Small Cap Index Fund
The Vanguard Group, Inc.	Total International Bond Index Fund
The Vanguard Group, Inc.	Total Stock Market Index Fund
The Vanguard Group, Inc.	Total Bond Market Index Fund
The Vanguard Group, Inc.	Total International Stock Index Fund
The Vanguard Group, Inc.	Inflation-Protected Securities Fund
The Vanguard Group, Inc.	Real Estate Index Fund

## APPENDIX B

## Separate Accounts, Commingled Funds &amp; Alternative Managers by Program

Prepaid529<sup>SM</sup>

<b>Investment Manager</b>	<b>Investment Strategy</b>
Adams Street Partners	Private Equity Fund of Funds
Advent Capital Management, LLC	Convertible Fixed Income
Aether Investment Partners, LLC	Private Equity Fund of Funds
Aurora Investment Management, LLC	Market Neutral Hedge Fund of Funds
BlackRock, Inc.	Intermediate Corporate Bonds
Blackstone Alternative Asset Management	Market Neutral Hedge Fund of Funds
Commonfund	Private Equity Fund of Funds
State Street Global Advisors	Small Cap Value Domestic Equity
Ferox Capital, LLP	Convertible Fixed Income
Golub Capital	Private Debt
Horsley Bridge Partners	Private Equity Fund of Funds
Invesco Advisers, Inc.	Stable Value Fixed Income
LGT Capital Partners	Private Equity Secondaries
Neuberger Berman	Private Equity Fund of Funds
PGIM Fixed Income	High-Yield Fixed Income
Private Advisors, LLC	Private Equity Fund of Funds
Sands Capital Management, LLC	Emerging Market Growth Fund
Schroders Investment Management North America Inc.	Mortgage Backed Securities
Shenkman Capital Management, Inc.	Senior Secured Bank Loans
State Street Global Advisors	Indexed US Inflation Protected Securities
Thompson, Siegel & Walmsley, LLC	SMID Cap Value Domestic Equity
UBS Realty Investors, LLC	Private Real Estate
Wellington Management Co., LLP	Emerging Market Debt
Westfield Capital Management Co., LP	SMID Growth Domestic Equity

Invest529<sup>SM</sup>

<b>Investment Manager</b>	<b>Investment Strategy</b>
Atlantic Union Bank	FDIC-Insured (Cash & Equivalents)
Blackstone Property Advisors L.P.	Private Real Estate
Invesco Advisers, Inc.	Stable Value Fixed Income
PGIM Fixed Income	High-Yield Fixed Income
Rothschild Asset Management, Inc.	SMID Cap Value Domestic Equity
UBS Realty Investors, LLC	Private Real Estate

**Appendix C**  
**Investment Details by Program as of June 30, 2019**  
**Prepaid529<sup>SM</sup>**

Investment Manager	Asset Class / Strategy	Mutual Fund(s) (if applicable)	Aggregate Fair Value <sup>3</sup>	% of Total Fund <sup>1</sup>
<b>Equities</b>				
Aberdeen Asset Management, Inc.	Emerging Market Equity	Emerging Market Equity	\$ 91,129,483	3.26%
Capital Research & Management Co.	International Growth	American Funds EuroPacific Growth	142,923,733	5.12%
Dimensional Fund Advisors, LP	Emerging Market Equity	Emerging Markets Core Equity	67,392,716	2.41%
State Street Global Advisors	Small-Cap Value	N/A	512,625	0.02%
Sands Capital Management , LLC	Emerging Market Growth	N/A	47,420,778	1.70%
Templeton Institutional Funds, Inc.	International Value	TIF International Equity Series	131,390,887	4.70%
The Vanguard Group, Inc.	Large-Cap Domestic Blend	Institutional Index	172,679,650	6.18%
Thompson, Siegel & Walmsley, LLC	Small/Mid-Cap Value	N/A	87,356,846	3.13%
Westfield Capital Management Co., LP	SMID-Cap Growth	N/A	146,483,535	5.24%
Total Equities			<b>\$ 887,290,253</b>	<b>31.76%</b>
<b>Alternative Investments</b>				
Adams Street Partners	Private Equity Fund of Funds	N/A	146,640,728	5.25%
Aether Investment Partners, LLC	Private Equity Fund of Funds	N/A	26,651,767	0.95%
Aventura Holdings, LLC	Private Real Estate	N/A	8,451,189	0.30%
Blackstone Alternative Asset Management	Hedge Fund of Funds	N/A	137,872,844	4.93%
Commonfund	Private Equity Fund of Funds	N/A	18,380,883	0.66%
Horsley Bridge Partners	Private Equity Fund of Funds	N/A	1,296,593	0.05%
LGT Capital Partners	Private Equity Secondaries	N/A	4,268,127	0.15%
Neuberger Berman	Private Equity Fund of Funds	N/A	19,921,883	0.71%
Private Advisors, LLC	Private Equity Fund of Funds	N/A	35,536,824	1.27%
UBS Realty Investors, LLC	Private Real Estate	N/A	51,406,178	1.84%
Total Alternative Investments			<b>\$ 450,427,016</b>	<b>16.12%</b>
<b>Fixed Income</b>				
Advent Capital Management, LLC	Convertible Bonds	N/A	127,159,719	4.55%
BlackRock Inc.	Intermediate Corporate Bonds	N/A	84,158,043	3.01%
Dreyfus Cash Investment Strategies <sup>2</sup>	Cash Equivalents	Dreyfus Cash Management	12,242,136	0.44%
Ferox Capital, LLP	Convertible Bonds	N/A	78,144,011	2.80%
Golub Capital	Private Debt	N/A	21,000,000	0.75%
Invesco Advisers, Inc. <sup>3</sup>	Stable Value	N/A	129,932,124	4.65%
PGIM Fixed Income	High Yield Bonds	N/A	251,008,989	8.98%
Schroders Investment Management, Inc.	Mortgage-Backed Securities	N/A	88,492,942	3.17%
Shenkman Capital Management, Inc.	Senior Secured Bank Loans	N/A	246,429,349	8.82%
State Street Global Advisors	Inflation-Protected Securities	N/A	135,366,937	4.85%
Stone Harbor Investment Partners LP	Emerging Markets Debt Blend	Emerging Markets Debt & Local Markets	82,667,307	2.96%
Wellington Management Co., LLP	Emerging Markets Debt	N/A	198,293,954	7.10%
Treasurer of Virginia	Cash Equivalents	N/A	918,117	0.03%
VA529 Transition Account	N/A	N/A	323,263	0.01%
Total Fixed Income			<b>\$ 1,456,136,891</b>	<b>52.12%</b>
Grand Total			<b>\$ 2,793,854,160</b>	<b>100.00%</b>

<sup>1</sup>May not sum to 100% due to rounding. <sup>2</sup>Operating Cash of \$18,351,444 is not included in the total above. <sup>3</sup>Stable value assets shown at contract value.

**Appendix C (cont.)**  
**Investment Details by Program as of June 30, 2019**  
**Invest529<sup>SM</sup>**

Investment Manager	Asset Class / Strategy	Mutual Fund (if applicable)	Aggregate Fair Value <sup>1</sup>
<b>Age-Based and Actively Managed Static Balanced Portfolios</b>			
Aberdeen Asset Management, Inc.	Emerging Markets Equity	Emerging Market Equity Fund	\$ 76,462,510
Blackstone Property Partners	Private Real Estate	N/A	47,694,782
Capital Research & Management Co.	International Growth	American Funds EuroPacific Growth	142,018,159
Dimensional Fund Advisors, LP	Emerging Market Equity	Emerging Markets Core Equity	75,665,402
Templeton Institutional Funds, Inc.	International Value Equity	Templeton International Equity Series	140,837,237
Invesco Advisers, Inc.	Stable Value	N/A	1,177,937,251
PGIM Fixed Income	High Yield Bonds	N/A	129,610,000
Rothschild Asset Management	Small/Mid Cap Domestic Equity	N/A	88,410,318
Stone Harbor Investment Partners LP	Emerging Markets Debt	Emerging Market Debt Fund	243,664,815
The Vanguard Group, Inc.	Intermediate Core Fixed Income	Total Bond Market Index Fund	412,734,062
The Vanguard Group, Inc.	Large-Cap Domestic Equity Blend	Institutional Index Fund	284,349,816
The Vanguard Group, Inc.	Small Cap Domestic Equity Blend	Small Cap Index Fund	63,265,773
The Vanguard Group, Inc.	U.S. Real Estate	Real Estate Index Fund	39,616,499
UBS Trumbull Property	Private Real Estate	N/A	69,317,767
<i>Total Age-Based Evolving Portfolios</i>			<b>\$ 2,991,584,391</b>
<b>Static Portfolios</b>			
Atlantic Union Bank	FDIC - Insured (Cash & Equivalents)	N/A	\$ 113,842,030
Capital Research & Management Co.	Global Small-Cap	American Funds SMALLCAP World Fund	120,075
Parnassus Investments	Socially Targeted Large Cap Core Equity	Core Equity Fund	73,346,161
The Vanguard Group, Inc.	Inflation Protected Securities	Inflation-Protected Securities Fund	27,745,997
The Vanguard Group, Inc.	U.S. Real Estate	Real Estate Index Fund	65,893,691
The Vanguard Group, Inc.	Intermediate Core Fixed Income	Total Bond Market Index Fund	283,784,836
The Vanguard Group, Inc.	International Equity	Total International Stock Index Fund	379,221,511
<i>The Vanguard Group, Inc.</i>	Domestic Equity Blend	Total Stock Market Index Fund	1,076,278,902
The Vanguard Group, Inc.	International Fixed Income	Total International Bond Index Fund	91,578,360
<i>Total Static Portfolios</i>			<b>\$ 2,111,811,563</b>
<b>Grand Total</b>			<b>\$ 5,103,395,954</b>

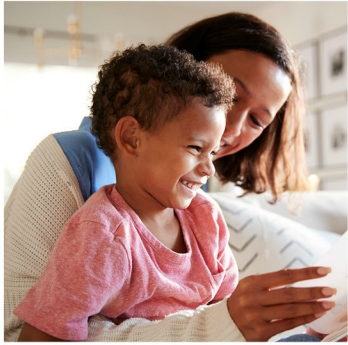
<sup>1</sup>Cash net of distributions liability held with Wells Fargo as well as with BNY Mellon (custodian) in the amount of \$2,810,694 is not included in the total above.

## APPENDIX D

<b>SCHEDULE OF INVESTMENT EXPENSES FOR THE YEAR ENDING JUNE 30, 2019</b>	
<b>Prepaid529</b>	<b>2019</b>
<b>Management Fees:</b>	
Domestic Equity Managers	\$ 2,345,772
International Equity Managers	3,441,536
Domestic Fixed Income Managers	2,563,449
International Fixed Income Managers	1,526,876
Convertibles Managers	1,554,273
Private Equity Managers	2,829,653
Hedge Fund Managers	1,439,287
Private Real Estate Managers	454,798
<b>Total Management Fees</b>	<b>\$ 16,155,644</b>
<b>Private Investment Performance Fees &amp; Expenses</b>	<b>\$ 1,236,837</b>
<b>Custodial and Other Expenses:</b>	
Custodial Fees	\$ 577,985
Legal Fees	3,927
Proxy Voting Services	5,712
Actuarial Services	110,893
<b>Total Custodial and Other Expenses</b>	<b>\$ 698,518</b>
<b>Investment Consulting</b>	<b>\$ 105,000</b>
<b>Total Prepaid529 Investment Expenses</b>	<b>\$ 18,195,998</b>

<b>Invest529</b>	<b>2019</b>
<b>Management Fees:</b>	
Domestic Equity	\$ 1,145,665
International Equity	3,043,937
Domestic Fixed Income	1,127,190
International Fixed Income	1,692,731
Real Estate	1,138,343
<b>Total Management Fees</b>	<b>\$ 8,147,866</b>
<b>Custodial and Other Expenses:</b>	
Custodial Fees	\$ 1,010,942
Proxy Voting Services	9,988
<b>Total Custodial and Other Expenses</b>	<b>\$ 1,020,929</b>
<b>Investment Consulting</b>	<b>\$ 183,579</b>
<b>Total Invest529 Investment Expenses</b>	<b>\$ 9,352,374</b>

**Notes:** Custodial, Proxy Voting Services, and Investment Consulting fees are allocated between Invest529 and Prepaid529 based on program Assets Under Management. Manager fees include both those fees that are charged directly on separately managed accounts as well as management fees that are implicit within a pooled vehicle's net asset value, and therefore do not agree to the face of the financial statements for the Enterprise or Private Purpose Trust Fund.



## Other Information



**Virginia529<sup>SM</sup>**  
**ABLEnow<sup>®</sup>**



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**CollegeAmerica®**

CollegeAmerica, a broker-sold IRC §529 college savings option, was launched on February 15, 2002. CollegeAmerica is a defined contribution savings program administered by Capital Research and Management Company, American Funds Distributors, Inc., and American Funds Service Company, Inc. (together, the American Funds) pursuant to a contract. The American Funds acts as program manager and provides all back office and operational services for the program. As a result of this structure, VA529 is responsible for program oversight and review; however, VA529's staff has minimal day-to-day operational responsibility. VA529 has contracted these services with the American Funds through February 15, 2050.

CollegeAmerica is available year round and has no age or residency restrictions. Accounts are subject to market risk, including the possible loss of principal. As of June 30, 2019, approximately 2.3 million unique active accounts were open with net assets in excess of \$66.4 billion. American Funds defines unique active accounts as unique open account numbers at period end. Fees and expenses of the program are also paid on a pro-rata basis by each account owner and vary according to the fund and share class selected.

During fiscal year 2019, the American Funds changed the name for two of the Portfolio Series funds. The Income Portfolio is now known as the American Funds Conservative Growth and Income Portfolio and the Balanced Portfolio is now the American Funds Moderate Growth and Income Portfolio. As of June 30, 2019, the CollegeAmerica program offered 43 American Funds mutual funds. A complete list of approved and available funds is shown in the tables on the following pages.

A separate audited report for each of the 43 funds available for investment in the CollegeAmerica program is published annually by the American Funds. Each of the funds has a different year ending date, so these audited reports are published throughout the year. An individual fund audit report includes that fund's results for all share classes offered in the fund, including the IRC §529 share classes created for the CollegeAmerica program. The individual fund reports are available in their entirety from the American Funds. A summary of the 529 Share Class Net Assets as of Fund Fiscal Year End and at June 30, 2019 for each fund are presented in the following charts.

## CollegeAmerica

## 529 Share Class Net Assets as of Fund Fiscal Year End (dollars and shares in thousands)

Fund	Shares	Net Assets	Fiscal Year End
<b>Growth funds</b>			
AMCAP Fund®	78,099	\$ 2,349,399	2/28/19
EuroPacific Growth Fund®	35,853	1,799,412	3/31/19
The Growth Fund of America®	200,677	11,088,44	8/31/18
The New Economy Fund®	18,436	823,741	11/30/18
New Perspective Fund®	58,995	2,720,602	09/30/18
New World Fund®	17,291	1,013,513	10/31/18
SMALLCAP World Fund®	31,725	1,861,483	09/30/18
<b>Growth-and-income funds</b>			
American Mutual Fund®	29,072	1,186,724	10/31/18
Capital World Growth and Income Fund®	85,018	4,047,122	11/30/18
American Funds Developing World Growth and Income Fund <sup>SM</sup>	4,992	48,387	11/30/18
Fundamental Investors®	55,079	2,875,040	12/31/18
International Growth and Income Fund <sup>SM</sup>	6,201	205,787	6/30/18
The Investment Company of America®	87,566	2,960,699	12/31/18
Washington Mutual Investors Fund <sup>SM</sup>	63,769	2,966,198	4/30/19
<b>Equity-income funds</b>			
Capital Income Builder®	49,173	2,851,731	10/31/18
The Income Fund of America®	94,955	2,204,739	7/31/18
<b>Balanced funds</b>			
American Balanced Fund®	194,014	4,822,375	12/31/18
American Funds Global Balanced Fund <sup>SM</sup>	12,300	373,921	10/31/18
<b>Bond funds</b>			
American High-Income Trust®	42,873	439,558	9/30/18
American Funds Inflation Linked Bond Fund®	3,404	32,463	11/30/18
The Bond Fund of America®	106,494	1,338,898	12/31/18
Capital World Bond Fund®	21,439	412,602	12/31/18
Intermediate Bond Fund of America®	41,883	550,299	8/31/18
Short-Term Bond Fund of America®	52,486	514,219	8/31/18
American Funds Strategic Bond Fund <sup>SM</sup>	3,095	30,376	12/31/18
U.S. Government Securities Fund®	14,184	189,591	8/31/18
American Funds Mortgage Fund®	3,494	34,348	8/31/18
American Funds Corporate Bond Fund®	4,018	41,930	5/31/19
American Funds Emerging Markets Bond Fund®	957	8,955	12/31/18
<b>Money market fund</b>			
American Funds U.S. Government Money Market Fund <sup>SM</sup>	1,781,463	1,781,420	09/30/18
<b>American Funds College Target Date Series funds</b>			
American Funds College 2021 Fund®	152,072	1,666,573	10/31/18
American Funds College 2024 Fund®	136,127	1,600,516	10/31/18
American Funds College 2027 Fund®	104,270	1,292,908	10/31/18
American Funds College 2030 Fund®	109,977	1,461,741	10/31/18
American Funds College 2033 Fund®	71,595	810,276	10/31/18
American Funds College 2036 Fund <sup>SM</sup>	9,117	88,501	10/31/18
American Funds College Enrollment Fund®	128,699	1,246,637	10/31/18
<b>American Funds Portfolio Series<sup>SM</sup> funds</b>			
American Funds Global Growth Portfolio <sup>SM</sup>	24,682	393,238	10/31/18
American Funds Growth Portfolio <sup>SM</sup>	56,356	1,003,358	10/31/18
American Funds Growth and Income Portfolio <sup>SM</sup>	49,507	723,210	10/31/18
American Funds Moderate Growth and Income Portfolio <sup>SM</sup>	35,193	502,172	10/31/18
American Funds Conservative Growth and Income Portfolio <sup>SM</sup>	17,202	209,954	10/31/18
American Funds Preservation Portfolio <sup>SM</sup>	15,688	152,042	10/31/18

Data compiled from American Funds audited fund statements. Funds listed are those open as of June 30, 2019.

**CollegeAmerica**  
**529 Share Class Net Assets as of June 30, 2019 (dollars and shares in thousands)**

<b>Fund</b>	<b>Shares</b>	<b>Net Assets</b>
<b>Growth funds</b>		
AMCAP Fund®	77,654	\$ 2,438,653
EuroPacific Growth Fund®	35,302	1,837,385
The Growth Fund of America®	218,437	10,778,453
The New Economy Fund®	19,922	880,580
New Perspective Fund®	61,767	2,717,994
New World Fund®	17,096	1,143,370
SMALLCAP World Fund®	33,104	1,818,786
<b>Growth-and-income funds</b>		
American Mutual Fund®	30,537	1,270,251
Capital World Growth and Income Fund®	86,728	4,219,546
American Funds Developing World Growth and Income Fund <sup>SM</sup>	4,993	52,298
Fundamental Investors®	54,790	3,241,634
International Growth and Income Fund <sup>SM</sup>	6,047	200,613
The Investment Company of America®	85,690	3,259,363
Washington Mutual Investors Fund <sup>SM</sup>	64,738	2,957,055
<b>Equity-income funds</b>		
Capital Income Builder®	48,050	2,935,563
The Income Fund of America®	95,968	2,152,528
<b>Balanced funds</b>		
American Balanced Fund®	197,000	5,374,190
American Funds Global Balanced Fund <sup>SM</sup>	12,186	398,973
<b>Bond funds</b>		
American High-Income Trust®	42,519	432,419
American Funds Inflation Linked Bond Fund®	3,494	34,404
The Bond Fund of America®	111,314	1,464,896
Capital World Bond Fund®	21,021	426,468
Intermediate Bond Fund of America®	43,761	594,254
Short-Term Bond Fund of America®	60,374	601,917
American Funds Strategic Bond Fund <sup>SM</sup>	3,935	41,034
U.S. Government Securities Fund®	15,222	212,394
American Funds Mortgage Fund®	3,619	36,718
American Funds Corporate Bond Fund®	4,215	44,931
American Funds Emerging Markets Bond Fund®	1,103	11,000
<b>Money market fund</b>		
American Funds U.S. Government Money Market Fund <sup>SM</sup>	2,157,927	2,157,927
<b>American Funds College Target Date Series funds</b>		
American Funds College 2021 Fund®	172,007	1,948,205
American Funds College 2024 Fund®	159,821	1,941,644
American Funds College 2027 Fund®	123,692	1,582,004
American Funds College 2030 Fund®	131,436	1,784,559
American Funds College 2033 Fund®	90,742	1,072,796
American Funds College 2036 Fund <sup>SM</sup>	23,914	250,608
American Funds College Enrollment Fund®	121,937	1,221,128
<b>American Funds Portfolio Series<sup>SM</sup> funds</b>		
American Funds Global Growth Portfolio <sup>SM</sup>	27,730	466,156
American Funds Growth Portfolio <sup>SM</sup>	66,064	1,217,547
American Funds Growth and Income Portfolio <sup>SM</sup>	54,892	825,325
American Funds Moderate Growth and Income Portfolio <sup>SM</sup>	37,598	563,896
American Funds Conservative Growth and Income Portfolio <sup>SM</sup>	19,913	251,156
American Funds Preservation Portfolio <sup>SM</sup>	18,637	186,519
<b>Total Assets</b>		<b>\$ 67,047,142</b>

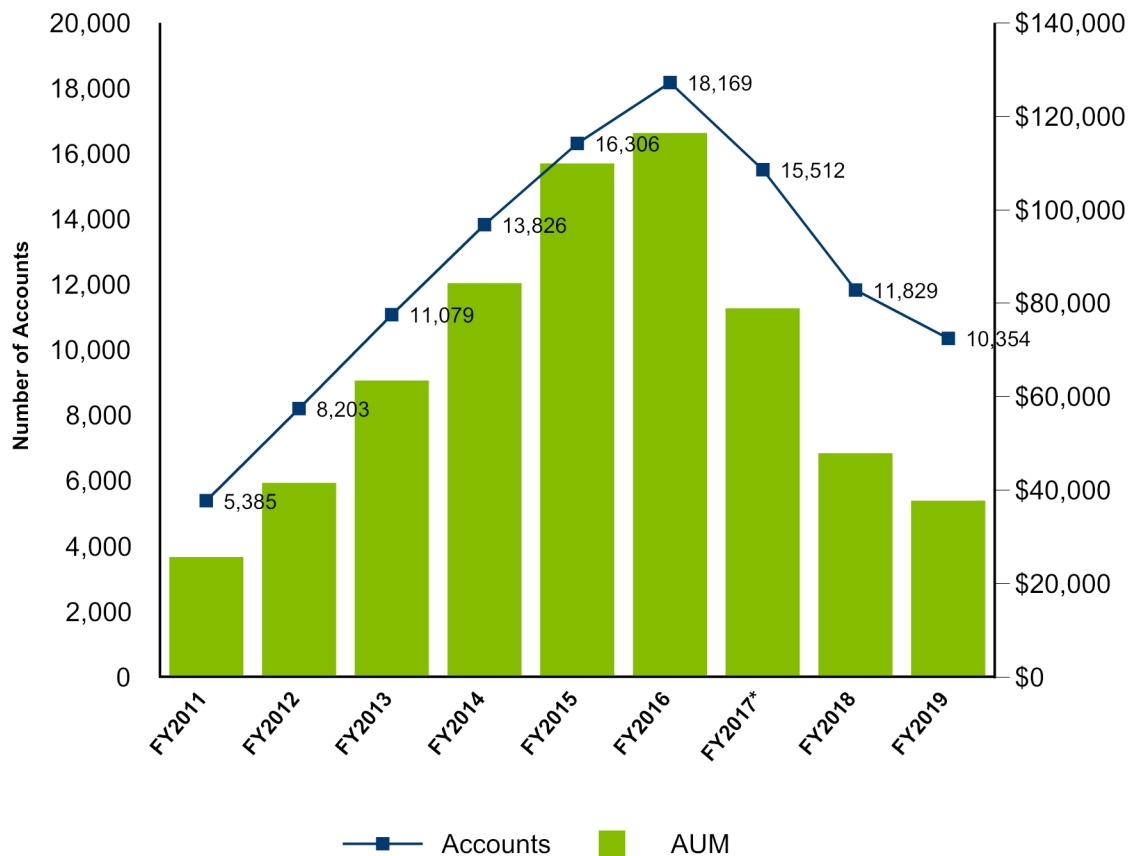
Data compiled from American Funds reports. Figures may not sum foot due to rounding.

## CollegeWealth®

CollegeWealth is VA529's FDIC-insured, defined contribution, 529 college savings program, which closed to new participants in fiscal 2017. Each CollegeWealth college savings account with a value up to \$250,000 (when combined with any other holdings of an individual at the bank) is FDIC insured. CollegeWealth began in the autumn of 2007 with Atlantic Union Bank (AUB) as VA529's first banking partner. In the autumn of 2009, VA529 added Branch Banking and Trust (BB&T) Corporation as a banking partner in an effort to significantly expand the availability of CollegeWealth within and outside of the Commonwealth.

In January 2017, VA529 introduced an FDIC-Insured Portfolio option within the Invest529 program through an omnibus account with AUB. With this offering VA529 terminated the existing CollegeWealth offering through AUB and transferred those remaining assets to the Invest529 FDIC-Insured Portfolio. On April 23, 2017, the CollegeWealth program offered through BB&T was closed to new participants. As of June 30, 2019, there were 10,354 unique active accounts with net assets of \$37.7 million remaining in the program. Unique active accounts represent all active accounts at period end. The net assets represented amounts held in savings instruments at the participating banks and were thus not subject to fair market value adjustments at year end.

### Assets and Accounts Under Management as of Fiscal Year End



\* On April 3, 2017, \$33.9 million representing 3,350 accounts was transferred from the CollegeWealth offering through Atlantic Union Bank to the Invest529 FDIC-Insured Portfolio.

## ABLE Programs

ABLE accounts were made possible by the federal Stephen Beck, Jr. Achieving a Better Life Experience (ABLE) Act, which authorized states to establish tax-advantaged savings programs for individuals with disabilities and their families to save for “qualified disability expenses” without losing certain federal means-tested benefits. The Virginia ABLE Act of the 2015 Virginia Acts of Assembly amended VA529’s enabling legislation, adding the development and implementation of ABLE program(s) to its statutory mission. Accordingly, VA529 established two IRC §529A savings options, ABLEnow and ABLEAmerica.

### ABLEnow®

ABLEnow launched in December 2016, and is a direct-sold defined contribution savings program with low-cost, target risk mutual funds (Vanguard Life Strategy Funds) as investment options administered through PNC Bank. VA529 is the program sponsor and manager, providing customer service for the program. VA529 has contracted with PNC Bank, N.A. to offer the ABLEnow program through November 29, 2021. The program offers an online portal to manage accounts and the ABLEnow Card - a debit card providing a simple, convenient way to pay for qualified disability expenses. Eligible individuals can start their ABLEnow account with no enrollment fee and no minimum contribution.

As of June 30, 2019, 6,135 accounts were open with more than \$22.8 million in assets under management. More information on ABLEnow can be found at [www.able-now.com](http://www.able-now.com).

### ABLEAmerica®

ABLEAmerica launched in July 2018, and is a broker-sold defined contribution savings program. The program is administered by American Funds pursuant to a contract. The American Funds acts as program manager and provides all back office and operational services for the program. As a result of this structure, VA529 is responsible for program oversight and review; however, VA529’s staff has minimal day-to-day operational responsibility. VA529 has contracted these services with the American Funds through February 15, 2050.

Accounts are subject to market risk, including the possible loss of principal. As of June 30, 2019, approximately 337 unique active accounts were open with net assets in excess of \$3.4 million. American Funds defines unique active accounts as unique open account numbers at period end. Fees and expenses of the program shall be waived until June 30, 2023 or until assets in the program exceed \$300 million, whichever occurs first.

A separate audited report for each of the seven (7) funds available for investment in the ABLEAmerica program is published by the American Funds. Each of the funds may have a different year ending date, so these audited reports are published throughout the year. An individual fund audit report includes that fund’s results for all share classes offered in the fund, including the IRC §529 share classes created for the ABLEAmerica program. The individual fund reports are available in their entirety from the American Funds. A summary of the 529 Share Class Net Assets as of Fund Fiscal Year End and at June 30, 2019 for each fund are presented in the following charts.

**ABLEAmerica****529 Share Class Net Assets as of Fund Fiscal Year End (dollars and shares in thousands)**

<b>Fund</b>	<b>Shares</b>	<b>Net Assets</b>	<b>Fiscal Year End</b>
<b>Money market fund</b>			
American Funds U.S. Government Money Market Fund <sup>SM</sup>	38	38	9/30/2018
<b>American Funds Portfolio Series<sup>SM</sup> funds</b>			
American Funds Global Growth Portfolio <sup>SM</sup>	3	53	10/31/2018
American Funds Growth Portfolio <sup>SM</sup>	4	65	10/31/2018
American Funds Growth and Income Portfolio <sup>SM</sup>	8	111	10/31/2018
American Funds Moderate Growth and Income Portfolio <sup>SM</sup>	10	144	10/31/2018
American Funds Conservative Growth and Income Portfolio <sup>SM</sup>	6	73	10/31/2018
American Funds Preservation Portfolio <sup>SM</sup>	5	47	10/31/2018

**ABLEAmerica****529 Share Class Net Assets as of June 30, 2019 (dollars and shares in millions)**

<b>Fund</b>	<b>Shares</b>	<b>Net Assets</b>
<b>Money market fund</b>		
American Funds U.S. Government Money Market Fund <sup>SM</sup>	245	245
<b>American Funds Portfolio Series<sup>SM</sup> funds</b>		
American Funds Global Growth Portfolio <sup>SM</sup>	18	297
American Funds Growth Portfolio <sup>SM</sup>	49	911
American Funds Growth and Income Portfolio <sup>SM</sup>	56	836
American Funds Moderate Growth and Income Portfolio <sup>SM</sup>	43	645
American Funds Conservative Growth and Income Portfolio <sup>SM</sup>	31	390
American Funds Preservation Portfolio <sup>SM</sup>	15	155



## Board Members



**Virginia529<sup>SM</sup>**  
**ABLEnow<sup>®</sup>**



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**VIRGINIA COLLEGE SAVINGS PLAN**  
N. Chesterfield, Virginia

**BOARD MEMBERS**

As of June 30, 2019

Dr. Edward H. Bersoff, Chairman

Mr. Reggie Samuel, Vice Chairman

Mr. Peter A. Blake

Dr. Glenn DuBois

Mr. William E. Eastburn

Ms. Manju Ganeriwala

Mr. Shawn P. McLaughlin

Ms. Martha M. Mugler

Hon. Walter A. Stosch

Mr. Peter M. Vogt

Mr. David A. Von Moll

**CHIEF EXECUTIVE OFFICER**

Ms. Mary G. Morris

## Committee Assignments

As of June 30, 2019

---

### Audit and Actuarial Committee:

#### Board Members:

Hon. Walter A. Stosch, Chairman  
David A. Von Moll, Vice Chairman  
Dr. Edward H. Bersoff  
Peter A. Blake  
Manju Ganeriwala  
Edward "Ted" Raspiller, permanent designee for Dr. Glenn DuBois  
Peter M. Vogt

### Compensation Committee:

#### Board Members:

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Martha M. Mugler, Vice Chairperson  
Dr. Edward Bersoff  
Edward "Ted" Raspiller, permanent designee for Dr. Glenn DuBois  
Reggie Samuel

### Investment Advisory Committee:

#### Board Members:

William E. Eastburn, Vice Chairman  
Dr. Edward H. Bersoff  
Manju Ganeriwala  
Reggie Samuel  
David A. Von Moll

#### Non-Board Members:

Christopher J. Dion, Chairman  
Sheila Corcoran  
Liza Scott

#### Ex Officio:

Mary G. Morris

# **Attachment B**

## **Actuarial Valuation Report PrePaid529 Program for the year ended June 30, 2019**

ACTUARIAL VALUATION  
OF  
Prepaid529  
AS OF JUNE 30, 2019

By:

ALAN H. PERRY, FSA, CFA  
GLENN D. BOWEN, FSA, EA  
JILL M. STANULIS, EA



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October 31, 2019

Board of the Virginia College Savings Plan  
Commonwealth of Virginia  
Virginia College Savings Plan  
9001 Arboretum Parkway  
N. Chesterfield, VA 23236

Ladies & Gentlemen:

This report presents the results of the actuarial valuation of the Prepaid529 Program as of June 30, 2019.

### Purpose

The main purposes of this report are:

- to calculate the actuarial present value of the obligations under Prepaid529 contracts purchased through June 30, 2019 and compare the value of those obligations with the assets in Prepaid529 as of that date;
- to review the experience and changes in the actuarial assumptions during the last year and indicate their effects on the results; and
- to set forth the basis for the actuarial assumptions and methods utilized in those calculations.

The results contained in this report are based on contract data and preliminary financial statements provided by the Virginia College Savings Plan. We have relied on this data in preparing this report.

### Background

In 1994, the Virginia General Assembly established the Virginia Higher Education Tuition Trust Fund (subsequently renamed the Virginia College Savings Plan) to enhance the accessibility and affordability of higher education for all citizens of the Commonwealth. The Prepaid529 fund consists of payments received pursuant to prepaid tuition contracts, bequests, endowments or grants from the United States government, its agencies and instrumentalities, and any other available sources of funds, public or private. Any moneys remaining in Prepaid529 at the end of a biennium shall remain in Prepaid529. Interest and income earned from the investment of such funds shall remain in Prepaid529.

This work product was prepared solely for the Virginia College Savings Plan for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

In 1998, the Virginia General Assembly passed legislation that requires the Governor to include in each year's state budget an amount to cover the Plan's obligations, which include Prepaid529, in the event "the Plan is unable to meet its current obligations." The Governor has included the provision in subsequent budget submissions to meet the Prepaid529 obligations, and the General Assembly has included the provision in subsequent Appropriation Acts, including Chapter 854 of the 2019 Virginia Acts of Assembly (2019 Appropriation Act).

### Program Design

Prepaid529 is one of three Section 529 options currently offered by the Virginia College Savings Plan. Under Prepaid529, participants purchase tuition contracts that provide coverage of tuition and mandatory fees at a public university and/or community college in Virginia. At redemption, the contract pays the current tuition and mandatory fees at the Virginia public university or community college that the beneficiary attends. The benefits vary if the beneficiary does not attend a Virginia public university or community college. With the establishment of Invest529 and other savings programs, contract holders have the option of rolling over the value of their Prepaid529 contract into a savings account. The value of the Prepaid529 contract for such rollovers is the accumulated contributions at the reasonable rate of interest set by Virginia529. This option to roll over the contract has effectively added a minimum benefit to the Program.

In 2019, The Virginia General Assembly passed legislation that included provisions for Prepaid529 contracts entered into prior to July 1, 2019. These provisions allow for the "Minimum Benefit" payout directly from Prepaid529 to qualified higher education institutions when the accumulated contributions at the reasonable rate of interest set by Virginia529 exceeds the normal payout from the program.

Due to the significant increase in the cost of higher education since Prepaid 529 opened in 1996 and other factors, the Board decided to permanently close Prepaid529 to new enrollments as of May 1, 2019. The Board anticipates opening a new, similar program in 2020.

### Statutory Requirements

The Code of Virginia, Title 23.1, Subtitle II, Chapter 7 provides limited guidance for establishing the actuarial basis to evaluate Prepaid529. The Code requires an annual audit of Prepaid529 and states in part that if the annual accounting and audit reveal that there are insufficient funds to ensure the "actuarial soundness" of Prepaid529, the "Board may adjust the terms of subsequent prepaid tuition contracts, arrange refunds for current purchasers to ensure actuarial soundness, or take such other action the Board deems appropriate."

“Actuarial soundness” is not a precise concept and there is no generally accepted understanding of the meaning of this phrase within the actuarial profession, especially with respect to prepaid tuition plans. For purposes of this report, we have assumed that the phrase “actuarially sound,” when applied to Prepaid529, means that the Fund has sufficient assets (including the value of future installment payments due under current contracts) to cover the actuarially estimated value of the tuition obligations under those contracts (including any administrative costs associated with those contracts).

We have also interpreted these Sections to require that the actuarial liabilities be evaluated using sound actuarial principles that are generally consistent with the practices and principles widely used for retirement programs. Reference to other programs is necessary because of the innovative nature of a prepaid tuition program. No generally accepted standard of practice has evolved within the actuarial profession specifically addressing prepaid tuition programs. We chose the standards applicable to retirement programs because these programs generally provide for payments at some future date where that payment has a high probability of payment at, or close to, some specific age.

#### Valuation Basis

The assumptions selected for this report are intended to be "best estimates".

The method for determining the “best estimate” liability for the Program reflects the possible variability of inflation, tuition, and investment returns and the correlation between each of these variables. The methodology is described in the section below, Variability of Results and Valuation Basis.

#### Prepaid Investment Policy

On June 25, 2009, the Board of the Virginia College Savings Plan adopted a new target asset allocation strategy for Prepaid529. On June 21, 2016 the Board reviewed the allocation strategy and recommended no changes to the allocation. On March 28, 2018, the Board approved blending the core (25%) and non-core (27.5%) fixed income categories into one fixed income category.

The investment strategy is important because it sets forth acceptable investment allocations among asset classes. The asset allocation affects the magnitude and variability of expected investment returns and therefore the financial structure of the plan. For the valuation, we have assumed that Prepaid529 investments will be allocated as shown below, based on the investment policy target allocations:

#### Asset Category

Equities	32.5%
Fixed Income	52.5%
Alternative Investments	15.0%



In August 2019, after completing an asset allocation analysis but subsequent to the financial reporting measurement date of this valuation, the Board approved changes to the policy target allocation. The changes have not been reflected in this report.

Actuarial Assumptions

The actuarial assumptions used to prepare this report are summarized in Appendix C. The two most significant of those assumptions are the rates of investment return and tuition growth in the future. The Virginia College Savings Plan selected both of these assumptions. They are:

- the investment return assumption of 5.75% per year, net of investment related expenses (this is the same as the assumption used to prepare the prior year’s report); and,
- the annual tuition growth rate assumptions summarized in the following table.

	<u>Universities</u>	<u>Community Colleges</u>
Fall 2020	4.0%	4.0%
Fall 2021	4.0%	4.0%
Fall 2022 and thereafter	6.0%	6.0%

In the prior year’s valuation the tuition growth assumption was 6.5% per year for universities and 6.0% per year for community colleges.

Summary of Results

The actuarial value of the obligations of Prepaid529 as of June 30, 2019 is summarized below and compared with the total assets of Prepaid529.

	Present Value of Obligations For Future <u>Payments</u>	Value of Total Prepaid529 <u>Assets</u>	Actuarial Reserve/ <u>(Deficit)</u>
<i>(Amounts in Millions)</i>			
Prepaid529:			
Tuition Obligations	\$1,965.4	n/a	n/a
Administrative Expenses	<u>26.1</u>	<u>n/a</u>	<u>n/a</u>
Grand Total	\$1,991.5	\$3,020.9	\$1,029.4

As indicated above, Prepaid529 has assets that exceed the “best estimate” of the obligations by roughly \$1,029.4 million or 51.7%. Unfavorable future experience would adversely affect this position. It would be desirable to maintain the actuarial reserve over time to protect this position.

The present value of future obligations for Administrative Expenses reflects the expected costs of maintaining each contract in place (as of June 30, 2019) until all tuition benefits have been paid and the expenses associated with making those payments. It does not include the future expenses of Prepaid529 associated with general overhead and marketing attributable to future contracts. The \$26.1 million administrative expense obligation is equivalent to about \$417 per contract.

### Actuarial Gain/Loss Analysis

During the 2019 fiscal year, the actuarial reserve position of Prepaid529 increased from a surplus of \$784.6 million to a surplus of \$1,029.4 million or 51.7% of obligations. Actuarial gains add to the reserve while actuarial losses decrease the reserve. Each of the factors affecting the change in the actuarial reserve/(deficit) is discussed below.

The actuarial surplus was expected to grow during the year by about \$45.1 million due to the passage of time. (The obligations are calculated as present values which grow with interest with the passage of time.)

The rate of return on Prepaid529 investments (net of investment management fees) for the fiscal year was 4.92% on a time-weighted basis and 4.95% on a dollar-weighted basis. For the previous valuation, a 5.75% rate of return was assumed. This produced a net actuarial loss of approximately \$21.5 million.

The enrollment-weighted average university tuition and mandatory fee amount for the 2019-2020 school year increased by 1.4%, a smaller increase than the 6.5% rate assumed in the prior valuation. Enrollment-weighted tuition and mandatory fees at community colleges increased by about 0.1%, a smaller increase than the 6.0% rate assumed in the prior valuation. These differences from the assumptions resulted in an actuarial gain of \$62.6 million.

Payouts for some of the contract holders are based on the account balance brought forward at the reasonable rate or the account balance brought forward at the actual rate of return on the portfolio. See Appendices C and F for an explanation of the assumptions and the payouts. During the past year the actual rate of return on the portfolio was 4.92% (0.83% lower than the 5.75% assumption). The lower than expected actual account balances resulted in an actuarial gain of approximately \$4.5 million.

The Plan sold 3,972 new contracts during the year. Each contract was priced so as to contribute to the actuarial reserve. We estimate that the reserve was increased by approximately \$7.7 million from these new contracts.

Prepaid529 received \$46.3 million in administrative fee revenue from all the Plan programs, including CollegeAmerica. Total agency operating expenses were \$29.1 million, of which \$7.3 million was expected to be provided by the Prepaid529 program, for a difference of \$21.8 million. The balance of the fee revenue, \$24.5 million (\$46.3 million less \$21.8 million), is an increase to the reserve.

The assumption for the reasonable rate was changed from 3.25% each year to a fixed 2.15% for the current fiscal year and 3.00% thereafter. The volatility and correlation assumptions for the investment returns and tuition increases were updated. The combined impact of these changes was a \$14.1 million increase to the reserve.

The tuition growth assumption for universities was decreased from 6.5% in all years, to 4.0% for fall 2020 and 2021 and 6.0% thereafter. Tuition increases for community colleges was changed from 6.0% in all years to 4.0% for fall 2020 and 2021 and 6.0% per year thereafter. These changes increased the reserve by \$66.6 million.

Other experience gains added about \$41.2 million to the reserve. This includes fewer contracts redeeming their units during the year than expected as well as rollover, cancellation, and forfeiture levels different than assumed in last year's valuation and other variations from the actuarial assumptions.

In summary, the effect of experience and assumption changes on the actuarial reserve/ (deficit) can be summarized as follows:

*(Amounts in Millions)*

Actuarial Reserve / (Deficit) as of June 30, 2018	\$ 784.6
Interest on the reserve at 5.75%	45.1
Investment gain / (loss)	(21.5)
Tuition gain / (loss)	62.6
Lower than expected actual account balances	4.5
Sales of new contracts	7.7
Administrative fee revenue from Virginia529	24.5
Change to reasonable rate and volatility assumptions	14.1
Change to tuition growth assumptions	66.6
Other experience gains	<u>41.2</u>
Actuarial Reserve / (Deficit) as of June 30, 2019	\$ 1,029.4

### Valuation Basis

The present values of the obligations shown above were based on assumptions which represent an estimate of anticipated experience under the Fund that are reasonably related to past educational cost and investment data. Differences between those projections and actual amounts will depend on the extent to which future experience conforms to the assumptions made for this analysis.

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A prime source of variation will be normal fluctuations that occur in the rate of increase in tuition, investment returns, and expense inflation. One way of estimating the range of possible outcomes is to stochastically model the financial operation of Prepaid529 using “Monte Carlo” techniques. This approach involves preparing 1,000 projections of financial results under randomly derived scenarios of tuition growth, investment returns, and expense inflation. Each of these scenarios is based on statistical factors such as standard deviation and correlation that were established by reviewing historical results adjusted where appropriate to reflect current conditions. By tabulating the results under all of these projections we estimated the probability that current assets, along with all anticipated contract payments plus investment returns, will be sufficient to cover the obligations of Prepaid529.

We have summarized in the table below the results of this process. It is important to understand that these results are only illustrative of the range of results that are possible and are dependent on the assumptions utilized. The assumptions are presented in Appendix C.

*(Amounts in Millions)*

<u>Percentage of “Best Estimate” Reserve</u>	<u>Total Prepaid529 Fund Value at June 30, 2019</u>	<u>Probability of Prepaid529 Funds Exceeding Obligation</u>
80%	\$1,593.2	4%
90%	1,792.3	22%
100%	1,991.5	50%
105%	2,091.0	67%
110%	2,190.6	79%
120%	2,389.8	92%
130%	2,588.9	98%
140%	2,788.1	99%
150%	2,987.2	99%
152%	3,020.9	99%*

\*actual Fund position.

The present value of obligations for future payments shown previously is the amount of assets necessary to have a 50% probability of meeting all program obligations, including administrative costs, associated with current contracts. The actual Prepaid529 fund balance at June 30, 2019 of \$3,020.9 million is 151.7% of the actuarially determined “Best Estimate” Reserve amount of \$1,991.5 million. As indicated in the above table, this Prepaid529 fund balance is estimated to have a 99% probability of being adequate to satisfy all Prepaid529 obligations using current assumptions.

### Cash Flow Projection

The table in Appendix E shows a cash flow projection based on a set of deterministic assumptions that produce the same Present Value of Obligations for Future Payments as the “best estimate” actuarial assumptions used in the Monte Carlo simulations. The deterministic cash flow projection assumes that University tuition increases 4.0% for fall 2020 and 2021 and 6.0% per year thereafter, Community College tuition increases of 4.0% for fall 2020 and 2021 and 6.0% per year, thereafter, and Prepaid529 assets earn 5.31% each year. The starting Market Value of Invested Assets as of July 1, 2019 is \$2,811.2 million. At the end of the 2044 Fiscal Year all tuition obligations associated with contracts already purchased are expected to have been paid resulting in a final cumulative surplus of \$3,755.9 million. Since the actuarial assumptions are intended to represent “best estimates” of future expenses, there is a 50% chance that actual results will be better than this projection and a 50% chance that actual results will be worse.

### Variability of Results

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: future experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and increases or decreases expected as part of the natural operation of the methodology used for these measurements. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

### Data Reliance

In performing this analysis, we relied on data and other information (some oral and some in writing) provided by the staff of the Virginia College Savings Plan. This information includes, but is not limited to, contractual provisions, contract holder data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

### Actuarial Assumptions

All costs, liabilities, and other factors for Prepaid529 have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of Prepaid529 and reasonable expectations). Further, the actuarial assumptions in the aggregate are reasonable and are related to the experience of Prepaid529 and to reasonable expectations. The following actuarial assumptions were set by the Virginia College Savings Plan:

- 1) the investment return assumption of 5.75% per year, and;
- 2) the tuition growth assumption for universities of 4.0% for fall of 2020 and 2021 and 6.0% per year thereafter and the tuition growth assumption for community colleges of 4.0% for fall of 2020 and 2021 and 6.0% per year thereafter.

### Certification

Based on the foregoing assumptions, Prepaid529 has sufficient assets, including the value of future installment payments, to cover the actuarially estimated value of the tuition obligations under all contracts outstanding as of the valuation date (including any administrative costs associated with those contracts). This determination has been based on reasonable actuarial assumptions that represent the Virginia College Savings Plan's best estimate of anticipated experience under Prepaid529 taking into account past experience and future expectations.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices.

### Third Party Distribution

This report was prepared exclusively for the Virginia College Savings Plan for a specific and limited purpose. It is a complex, technical analysis that assumes a high level of knowledge concerning the Virginia College Savings Plan's operations, and uses the Virginia College Savings Plan's data, which Milliman has not audited. It is not for the use or benefit of any third party for any purpose. Any third party recipient of Milliman's work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs.

### Qualifications

We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

The consultants who worked on this assignment are actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

We look forward to reviewing the results of our analyses with you at your earliest convenience.

Respectfully submitted,



Alan H. Perry, FSA, CFA  
Member American Academy of Actuaries



Glenn D. Bowen, FSA, EA  
Member American Academy of Actuaries



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Member American Academy of Actuaries

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## Prepaid529

### I. Statement of Assets as of June 30, 2019

<u>Investments</u>	<u>Market Value</u>
1) Equities	\$ 853,093,627
2) Fixed Income including Accrued Interest	1,818,587,147
3) Futures, REIT Fund, and Real Estate	74,503,070
4) Cash & Cash Equivalents	67,418,558
5) Prepaid Assets	785,718
6) Other Investments	190,242
7) Pending Trade Receivables	4,540,868
8) Property & Equipment	1,044,426
9) Accounts Receivable	12,370,040
10) Net OPEB Asset	444,000
11) Other Receivables	5,767,806
12) Accounts Payable	(13,011,653)
13) Other Payables	(736,277)
14) Deferred Outflow	2,086,438
15) Deferred Inflow	(1,758,141)
16) Accrued Liabilities	(14,097,267)
Total Market Value of Investments	\$ 2,811,228,601
Present Value of Installment Contract Receivables	<u>209,668,962</u>
Value of Total Fund Assets	\$ 3,020,897,563

### II. Reconciliation of Investments

1) Market Value of Investments at June 30, 2018	\$ 2,725,629,466
2) Contract Purchase Payments	113,472,864
3) Application Fees	103,790
4) Administrative Fee Revenue	46,317,462
5) Interest and Dividends	93,302,587
6) Realized and Unrealized Gains/(Losses)	48,838,511
7) Tuition Benefits Paid	(125,273,945)
8) Refunds Paid	(12,396,084)
9) Net Rollovers	(39,895,151)
10) Administrative Expenses	(29,060,514)
11) Investment Management Fees	(9,995,442)
12) Depreciation	(229,105)
13) Net Transfers to the Commonwealth	(380,986)
14) Net Effect of Changes in Accruals of Assets and Liabilities	<u>795,148</u>
15) Market Value of Investments at June 30, 2019	\$ 2,811,228,601
Time-weighted rate of return	4.92%
Dollar-weighted rate of return	4.95%

### Appendix A

This work product was prepared solely for the Virginia College Savings Plan for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.



Prepaid529

Contract Data as of June 30, 2019 – Contracts Purchasing Tier I Units Only - Number of Contracts

Matriculation Year	Total Years of Community College Purchased										Total by Payout Year	Percent of Total
	Total Years of University Purchased											
	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5		
2000-2001	0	0	0	2	0	1	0	19	0	1	23	0.0%
2001-2002	0	3	0	2	0	0	0	32	0	0	37	0.1%
2002-2003	0	9	0	2	0	0	0	39	0	6	56	0.1%
2003-2004	0	3	0	7	0	1	0	55	0	1	67	0.1%
2004-2005	0	6	0	9	0	1	0	78	0	4	98	0.2%
2005-2006	0	16	0	16	0	1	0	135	0	10	178	0.3%
2006-2007	0	13	0	26	0	11	0	159	0	15	224	0.4%
2007-2008	0	26	0	35	0	6	0	189	0	17	273	0.5%
2008-2009	0	32	0	33	0	9	0	266	0	31	371	0.6%
2009-2010	0	35	0	35	0	14	0	368	0	32	484	0.8%
2010-2011	0	46	0	71	0	19	0	418	0	47	601	1.0%
2011-2012	0	48	0	61	0	17	0	521	0	48	695	1.2%
2012-2013	1	85	1	89	0	25	0	593	0	70	864	1.5%
2013-2014	0	75	0	101	0	29	1	748	0	69	1,023	1.8%
2014-2015	0	119	1	117	0	36	1	854	0	89	1,217	2.1%
2015-2016	0	120	0	158	2	36	4	1,182	0	99	1,601	2.8%
2016-2017	4	212	5	264	2	90	3	2,575	0	122	3,277	5.6%
2017-2018	29	327	6	363	11	153	9	2,478	1	134	3,511	6.1%
2018-2019	62	427	28	571	6	122	4	2,487	1	158	3,866	6.7%
2019-2020	146	603	29	572	11	138	5	2,334	1	138	3,977	6.9%
2020-2021	193	624	34	529	18	132	6	2,038	0	114	3,688	6.4%
2021-2022	301	741	64	596	32	172	7	2,107	2	137	4,159	7.2%
2022-2023	434	722	68	670	30	151	7	1,592	2	58	3,734	6.4%
2023-2024	459	740	58	524	25	128	11	1,449	2	67	3,463	6.0%
2024-2025	444	619	69	481	20	116	3	1,202	4	75	3,033	5.2%
2025-2026	484	611	53	476	25	78	11	1,031	1	65	2,835	4.9%
2026-2027	456	533	53	350	16	76	5	817	3	44	2,353	4.1%
2027-2028	421	486	52	368	16	73	7	748	3	40	2,214	3.8%
2028-2029	411	407	53	304	20	59	8	624	1	30	1,917	3.3%
2029-2030	421	366	44	253	10	37	4	510	1	28	1,674	2.9%
2030-2031	392	292	44	235	13	45	3	365	1	19	1,409	2.4%
2031-2032	420	287	30	159	14	26	4	307	2	16	1,265	2.2%
2032-2033	348	215	27	154	6	29	7	244	1	21	1,052	1.8%
2033-2034	284	188	28	111	12	22	3	184	1	13	846	1.5%
2034-2035	235	157	19	116	8	19	2	158	0	9	723	1.2%
2035-2036	197	145	20	107	12	33	5	154	1	12	686	1.2%
2036-2037	81	89	10	56	2	15	2	104	0	11	370	0.6%
2037-2038	34	33	4	45	2	6	0	38	0	4	166	0.3%
<b>Total</b>	<b>6,257</b>	<b>9,460</b>	<b>800</b>	<b>8,068</b>	<b>313</b>	<b>1,926</b>	<b>122</b>	<b>29,202</b>	<b>28</b>	<b>1,854</b>	<b>58,030</b>	
<b>Percent of Total</b>	<b>10.8%</b>	<b>16.3%</b>	<b>1.4%</b>	<b>13.9%</b>	<b>0.5%</b>	<b>3.3%</b>	<b>0.2%</b>	<b>50.3%</b>	<b>0.0%</b>	<b>3.2%</b>		

Prepaid529

Contract Data as of June 30, 2019 – Contracts Purchasing Tier II Units Only - Number of Contracts

Matriculation Year	Total Years of Community College Purchased														Total by Payout Year	Percent of Total
	Total Years of University Purchased															
	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	8	10		
2000-2001	0	1	0	4	0	0	0	0	0	0	0	0	0	0	5	0.2%
2001-2002	0	0	0	14	0	0	0	0	0	0	0	0	0	0	14	0.6%
2002-2003	0	2	0	7	0	0	0	0	0	0	0	0	0	0	9	0.4%
2003-2004	0	1	0	5	0	1	0	0	0	0	0	0	0	0	7	0.3%
2004-2005	0	2	0	15	0	1	0	0	0	0	0	0	0	0	18	0.8%
2005-2006	0	1	0	23	0	1	0	0	0	0	0	0	0	0	25	1.1%
2006-2007	0	1	0	19	0	1	0	0	0	0	0	0	0	0	21	0.9%
2007-2008	0	2	0	31	0	3	0	0	0	0	0	0	0	0	36	1.5%
2008-2009	0	1	0	24	0	1	0	0	0	0	0	0	0	0	26	1.1%
2009-2010	0	2	0	34	0	5	0	0	0	0	0	0	0	0	41	1.7%
2010-2011	0	12	0	40	0	1	0	0	0	0	0	0	0	0	53	2.2%
2011-2012	0	5	0	47	0	8	0	0	0	0	0	0	0	0	60	2.5%
2012-2013	1	9	0	47	0	9	0	0	0	0	0	0	0	0	66	2.8%
2013-2014	0	10	0	44	0	2	0	0	0	0	0	0	0	0	56	2.4%
2014-2015	0	21	0	57	0	11	0	0	0	0	0	0	0	0	89	3.8%
2015-2016	0	14	0	76	0	2	0	0	0	0	0	0	0	0	92	3.9%
2016-2017	0	16	0	69	0	4	0	0	0	0	0	0	0	0	89	3.8%
2017-2018	2	22	0	76	0	10	0	0	0	0	0	0	0	1	111	4.7%
2018-2019	5	24	1	88	2	9	0	0	0	0	0	0	0	1	130	5.5%
2019-2020	11	43	0	94	0	18	0	2	0	0	0	0	0	2	170	7.2%
2020-2021	8	42	1	99	1	10	0	0	0	0	0	0	0	0	161	6.8%
2021-2022	6	44	1	86	1	9	0	0	0	0	0	0	0	0	147	6.2%
2022-2023	11	38	0	82	1	2	0	1	0	0	0	0	0	0	135	5.7%
2023-2024	9	41	1	71	2	7	0	2	0	0	0	0	0	1	134	5.7%
2024-2025	9	39	1	51	1	4	0	1	0	0	0	0	0	0	106	4.5%
2025-2026	10	30	1	40	0	2	0	1	0	1	0	0	0	2	87	3.7%
2026-2027	8	12	0	41	0	8	0	1	1	0	0	0	0	0	71	3.0%
2027-2028	10	19	0	35	0	4	0	0	0	2	0	0	0	1	71	3.0%
2028-2029	11	19	1	38	1	2	0	1	0	0	0	0	0	0	73	3.1%
2029-2030	10	11	0	40	0	3	1	1	1	0	0	0	0	0	67	2.8%
2030-2031	20	11	0	22	1	1	1	3	0	0	0	0	0	1	60	2.5%
2031-2032	18	7	2	17	0	2	0	0	0	0	0	0	0	0	46	2.0%
2032-2033	12	10	0	15	0	2	0	0	0	0	0	0	0	0	39	1.7%
2033-2034	11	5	1	8	0	1	0	3	0	0	0	0	0	0	29	1.2%
2034-2035	4	4	0	4	0	0	0	0	0	0	0	0	0	0	12	0.5%
2035-2036	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0.0%
2036-2037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
<b>Total</b>	176	521	10	1,464	10	144	2	16	2	3	0	0	0	9	2,357	
<b>Percent of Total</b>	7.5%	22.1%	0.4%	62.1%	0.4%	6.1%	0.1%	0.7%	0.1%	0.1%	0.0%	0.0%	0.0%	0.4%		



Prepaid529

Participant Data as of June 30, 2019 – Remaining Years of Tuition

<u>Expected Payout Year</u>	<u>University Years</u>	<u>Community College Years</u>
2019-2020	20,512	1,072
2020-2021	15,631	812
2021-2022	14,423	658
2022-2023	13,469	625
2023-2024	11,094	496
2024-2025	10,014	450
2025-2026	8,805	383
2026-2027	7,419	302
2027-2028	6,411	258
2028-2029	5,528	227
2029-2030	4,692	196
2030-2031	3,957	170
2031-2032	3,290	135
2032-2033	2,681	110
2033-2034	2,165	87
2034-2035	1,769	61
2035-2036	1,498	38
2036-2037	1,187	25
2037-2038	885	13
2038-2039	585	5
2039-2040	336	2
2040-2041	167	1
2041-2042	69	0
2042-2043	26	0
2043-2044	<u>7</u>	<u>0</u>
Total	136,620	6,126

Prepaid529

Summary of Actuarial Assumptions

Investment / Economic Assumptions for Stochastic Simulation Model:

The standard deviation and correlation assumptions are based on actual historical returns and tuition growth. Expected return assumptions are based on Milliman’s investment assumptions, but are adjusted so that the expected annualized return on the portfolio is 5.75%, which is the assumption set by the Board.

	<u>Inflation</u>	Reason -able Rate	Global Equity	Non- Core Fixed Income	Core Fixed Income	Alternative Investments	University Tuition	CC Tuition
Expected Arithmetic Mean Annual Return	2.50%	3.00%	8.30%	5.10%	3.00%	8.50%	6.06%	6.09%
Standard Deviation	2.00%	2.00%	17.80%	8.00%	3.35%	17.75%	4.30%	6.65%
Correlation:								
Inflation	1.00	0.62	0.26	0.10	0.22	0.22	0.22	0.01
Reasonable Rate		1.00	0.21	0.21	0.54	0.00	0.05	-0.17
Global Equity			1.00	0.59	0.10	0.58	0.11	-0.08
Non-Core Fixed Income				1.00	0.57	0.34	0.35	0.00
Core Fixed Income					1.00	-0.23	0.29	0.25
Alternative Investments						1.00	-0.17	-0.28
University Tuition							1.00	0.61
CC Tuition								1.00

Based on the economic assumptions above, the expected long-term annualized compound rate of return on investments is 5.75%. The expected annualized compound rate of tuition growth for university and community colleges is 4.00% for the next two years and then 6.00% thereafter. The Reasonable Rate was fixed at 2.15% for the first year with a mean yield of 3.00% thereafter.

Matriculation and Bias:

Starting in the year of matriculation, it is assumed that 76% of beneficiaries will attend a public university in Virginia, 7.6% will attend a private university in Virginia, 11.4% will attend a university in another state, and 5.0% will request a cancellation, transfer, or rollover to a savings plan. Weighted average tuition for four-year public universities in Virginia was adjusted with an 8.0% load to add a bias for matriculation at more expensive schools. Weighted average tuition for two-year community colleges in Virginia was adjusted with a 1.0% load to add a bias for matriculation at more expensive schools. The highest tuition for a public university in Virginia was assumed to be 176% of weighted average tuition (\$23,628/\$13,395 as shown in Appendix D). Out-of-state students and contracts requesting a rollover are assumed to receive a benefit equal to the payments made on the contract plus interest at the composite reasonable rate of return.

Prepaid529

Summary of Actuarial Assumptions  
(continued)

Combination Contracts:

For combination contracts a portion of the remaining university and community college years are assumed to be paid each year. For combination contracts currently in payout with only university years or community college years remaining, the applicable remaining years are assumed to be paid.

Utilization:

It is assumed that participants will begin utilizing their contract at the following rates, and then redeem up to two semesters of tuition per year until the contract is depleted:

Years since Matriculation	Number of Semesters of Tuition Purchased							
	<u>Year</u>	<u>1 - 2</u>	<u>3 - 4</u>	<u>5 - 6</u>	<u>7 - 8</u>	<u>9 - 10</u>	<u>11-12</u>	<u>13+</u>
0		50%	60%	60%	80%	85%	85%	100%
1		15%	10%	20%	10%	8%	15%	
2		10%	15%	10%	5%	7%		
3		10%	5%	5%	5%			
4		5%	5%	5%				
5		5%	5%					
6		5%						

Forfeiture: It is assumed that contracts will be forfeited prior to the year of matriculation at a rate of 0.5% per year.

Expenses: The expenses included in the present value of future obligations are those relating to:

Annual Maintenance Expense per Contract = \$62.56

Annual Distribution Cost per Contract in Payment Status = \$27.70

The expense assumptions were developed from a cost analysis by Virginia College Savings Plan staff with adjustments for anticipated increases since the analysis was performed in 2013.

These expenses are assumed to increase annually at the rate of inflation plus 0.5%.

Appendix C  
(Page 2 of 3)

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Prepaid529

Summary of Actuarial Assumptions  
(continued)

Contracts behind in their monthly payments: The monthly scheduled payment amount is increased by an amount that allows for the full payment under the contract by June of the year of expected matriculation.

Rationale for Assumptions:

All of the actuarial assumptions with the exception of the investment return, the tuition growth rate, and the reasonable rate, were based on the results of an experience study performed in 2014 (see the Experience Study report dated September 22, 2014).

The reasonable rate assumption was based on the current money market yield used to set the rate and forecasts of future short-term interest rates from a survey of economists published in the *June 2019 Blue Chip Financial Forecasts*.

The investment return assumption is set by the Board based on recommendations from Virginia529's investment consultant.

The tuition growth assumptions are also set by the Board. Milliman assisted Virginia529 staff in 2015 with a historical analysis of long-term tuition growth at public colleges in Virginia.

Prepaid529

Derivation of Enrollment-Weighted Average Tuition  
and Mandatory Fees at Four Year Universities  
Based on Projected Enrollment for 2019-2020

<u>School</u>	<u>Tuition and Fees 2019-2020</u>	<u>Projected FTE for In-State Undergraduate 2019-2020</u>	<u>Percent Distribution</u>
Christopher Newport	\$14,924	4,523	3.38%
George Mason	12,564	20,944	15.64%
James Madison 2018 & 2019 Students	12,206	7,573	5.65%
James Madison Returning Students	11,576	7,573	5.65%
Longwood	13,520	3,763	2.81%
Mary Washington	13,270	3,566	2.66%
Norfolk State	9,622	2,749	2.05%
Old Dominion	11,020	14,927	11.15%
Radford	11,350	7,526	5.62%
University of Virginia	16,640	11,462	8.56%
UVA - Wise	10,252	1,431	1.07%
Virginia Commonwealth	14,596	19,000	14.19%
Virginia Military Institute	19,118	1,219	0.91%
Virginia Tech	13,691	20,235	15.11%
Virginia State	9,154	3,255	2.43%
William & Mary - 2019 Students	23,628	1,043	0.78%
William & Mary - 2018 Students	23,628	1,043	0.78%
William & Mary - 2017 Students	22,564	1,043	0.78%
William & Mary - 2016 Students	21,868	<u>1,043</u>	<u>0.78%</u>
<b>Weighted Average Tuition and Fees*</b>	<b>\$13,395</b>	133,916	100.00%

\*Assumes that 2018 and 2019 students are 50% of total FTE for James Madison. Assumes that 2016, 2017, 2018, and 2019 students are each 25% of total FTE for William & Mary.

Appendix D  
(Page 1 of 3)

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Prepaid529

Derivation of Enrollment-Weighted Average Tuition  
and Mandatory Fees at Community Colleges  
Based on Actual Enrollment for 2018-2019

<u>School</u>	<u>Tuition and Fees 2019-2020</u>	<u>Annualized In-State FTE Academic Year 2018-2019</u>	<u>Percent Distribution</u>
Blue Ridge	\$5,722	2,314	2.40%
Central Virginia	5,160	2,331	2.42%
Dabney S. Lancaster	5,040	595	0.62%
Danville	5,024	1,735	1.80%
Eastern Shore	5,120	345	0.36%
Germanna	5,240	4,272	4.43%
J Sargeant Reynolds	5,331	5,331	5.52%
John Tyler	5,120	5,376	5.57%
Lord Fairfax	5,051	3,874	4.01%
Mountain Empire	5,024	1,554	1.61%
New River	5,010	2,555	2.65%
Northern Virginia	5,984	29,313	30.37%
Patrick Henry	5,035	1,656	1.72%
Paul D Camp	5,045	773	0.80%
Piedmont Virginia	5,109	2,697	2.79%
Rappahannock	5,141	1,722	1.78%
Richard Bland	8,100	1,217	1.26%
Southside Virginia	5,008	2,024	2.10%
Southwest Virginia	5,016	1,569	1.63%
Thomas Nelson	5,126	4,912	5.09%
Tidewater	5,931	13,711	14.21%
Virginia Highlands	5,024	1,440	1.49%
Virginia Western	5,712	3,646	3.78%
Wytheville	5,040	<u>1,544</u>	<u>1.60%</u>
<b>Weighted Average Tuition and Fees</b>	<b>\$5,572</b>	96,506	100.00%

Appendix D  
(Page 2 of 3)

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Prepaid529

History of Enrollment-Weighted Average Tuition and Mandatory Fees  
at Four Year Universities and Community Colleges in Virginia

Academic Year	University Tuition and Fees	% Increase	Community College Tuition and Fees	% Increase
1988-1989	\$2,377		\$778	
1989-1990	2,544	7.0%	798	2.5%
1990-1991	2,702	6.2%	894	12.0%
1991-1992	2,985	10.5%	1,050	17.4%
1992-1993	3,357	12.5%	1,230	17.1%
1993-1994	3,659	9.0%	1,320	7.3%
1994-1995	3,789	3.6%	1,359	3.0%
1995-1996	3,949	4.2%	1,445	6.3%
1996-1997	4,002	1.3%	1,445	0.0%
1997-1998	4,095	2.3%	1,445	0.0%
1998-1999	4,217	3.0%	1,445	0.0%
1999-2000	3,721	(11.8%)	1,159	(19.8%)
2000-2001	3,793	1.9%	1,159	0.0%
2001-2002	3,843	1.3%	1,159	0.0%
2002-2003	4,122	7.3%	1,671	44.3%
2003-2004	5,033	22.1%	1,882	12.6%
2004-2005	5,559	10.5%	2,006	6.5%
2005-2006	5,990	7.8%	2,135	6.4%
2006-2007	6,529	9.0%	2,269	6.3%
2007-2008	6,966	6.7%	2,404	5.9%
2008-2009	7,562	8.6%	2,584	7.5%
2009-2010	7,912	4.6%	2,781	7.6%
2010-2011	8,803	11.3%	3,285	18.1%
2011-2012	9,507	8.0%	4,179*	27.2%*
2012-2013	9,856	3.7%	4,426	5.9%
2013-2014	10,225	3.7%	4,619	4.4%
2014-2015	10,797	5.6%	4,835	4.7%
2015-2016	11,409	5.7%	5,101	5.5%
2016-2017	11,961	4.8%	5,263	3.2%
2017-2018	12,494	4.5%	5,439	3.3%
2018-2019	13,210	5.7%	5,569	2.4%
2019-2020	13,395	1.4%	5,572	0.1%

\* Starting with the 2011-2012 year, Community College Tuition and Fees is measured as an enrollment-weighted average. Prior to that, a non-enrollment-weighted average was used. Enrollment numbers taken from SCHEV's website.

Compounded Increase in Average Tuition

Over last 5 years:	4.4%	2.9%
Over last 10 years:	5.4%	7.2%
Over last 15 years:	6.0%	7.0%
Over last 20 years:	6.6%	8.2%
Over last 25 years:	5.2%	5.8%
Over last 30 years:	5.7%	6.7%

Prepaid529

Cash Flow Projection  
(amounts in millions)

<u>Fiscal Year</u>	<u>Beginning Balance</u>	<u>Installment Payments*</u>	<u>Tuition Benefits</u>	<u>Expenses</u>	<u>Investment Income</u>	<u>Ending Balance</u>
2020	\$2,811.2	\$50.0	\$283.1	\$4.4	\$139.5	\$2,713.2
2021	2,713.2	40.5	228.2	4.1	136.2	2,657.6
2022	2,657.6	33.6	222.1	3.7	133.2	2,598.6
2023	2,598.6	28.1	222.5	3.5	129.8	2,530.5
2024	2,530.5	22.9	197.7	2.9	127.2	2,480.0
2025	2,480.0	18.5	190.8	2.6	124.6	2,429.7
2026	2,429.7	15.1	179.4	2.3	122.4	2,385.5
2027	2,385.5	12.3	161.2	2.0	120.6	2,355.2
2028	2,355.2	10.0	148.4	1.7	119.5	2,334.6
2029	2,334.6	7.8	136.2	1.5	118.9	2,323.6
2030	2,323.6	6.0	122.8	1.3	118.7	2,324.2
2031	2,324.2	4.7	109.8	1.1	119.2	2,337.2
2032	2,337.2	3.6	96.6	0.9	120.4	2,363.7
2033	2,363.7	2.7	83.3	0.7	122.3	2,404.7
2034	2,404.7	2.0	71.0	0.6	124.9	2,460.0
2035	2,460.0	1.3	61.2	0.5	128.3	2,527.9
2036	2,527.9	0.6	54.5	0.4	132.3	2,605.9
2037	2,605.9	0.2	45.4	0.3	136.6	2,697.0
2038	2,697.0	0.0	35.6	0.2	141.9	2,803.1
2039	2,803.1	0.0	24.8	0.1	147.9	2,926.1
2040	2,926.1	0.0	15.0	0.1	154.9	3,065.9
2041	3,065.9	0.0	7.9	0.0	162.6	3,220.6
2042	3,220.6	0.0	3.4	0.0	171.0	3,388.2
2043	3,388.2	0.0	1.4	0.0	180.0	3,566.8
2044	3,566.8	0.0	0.4	0.0	189.5	3,755.9

\* Future installment payments for contracts as of June 30, 2019.

Appendix E

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## Prepaid529

### Prepaid Tuition Benefits

For beneficiaries attending a Virginia public college, university, or community college, Prepaid529 will pay the full amount of in-state undergraduate tuition and all mandatory fees for a normal full-time course load for a general course of study on a semester-by-semester basis for the type of school and number of years purchased. Prepaid529 payments to in-state public schools will not exceed the actual cost of the in-state undergraduate tuition and mandatory fees. In 2019, the Virginia General Assembly passed legislation that included provisions for Prepaid529 contracts entered into prior to July 1, 2019. These provisions allow for payment of the “Minimum Benefit” (contract payments, accumulated at the reasonable rate of return), on a semester by semester basis, directly from Prepaid529 to qualified higher education institutions when it exceeds the normal payout from the program. The contract-holder also has the option to transfer the total amount of all payments, accumulated at the reasonable rate of return, to a Virginia529 savings program, and request a distribution from the respective program to pay for qualified higher education expenses.

For beneficiaries attending a Virginia independent (private) college or university, Prepaid529 will pay to the Virginia private school, including certain private career schools, the lesser of 1) the payments made on the contract plus the actual rate of return earned on the Fund or 2) the highest in-state undergraduate tuition and mandatory fees at a Virginia public school in the same academic year the benefits are used. All payments will be made directly to the school on a semester-by-semester basis following the school’s add-drop period. The student or his or her family is responsible for any additional expenses not covered by Prepaid529. The contract-holder has the option to transfer the total amount of all payments, accumulated at the reasonable rate of return, to a Virginia529 savings program and request a distribution from the respective program to pay for qualified higher education expenses.

For beneficiaries attending an out-of-state public or private college or university, Prepaid529 will pay the lesser of 1) the payments made on the contract plus interest at the composite reasonable rate of return or 2) the average in-state undergraduate tuition and mandatory fees at Virginia public schools for the same academic year the benefits are used. Payments will be made on a semester-by-semester basis by depositing the amount of the benefit to an Invest529 account. The student or his or her family is responsible for any additional expenses not covered by Prepaid529. The contract-holder has the option to transfer the total amount of all payments, accumulated at the reasonable rate of return, to a Virginia529 savings program and request a distribution from the respective program to pay for qualified higher education expenses.

The reasonable rate of return tracks the quarterly performance of the Institutional Money Funds Index as reported in the Money Fund Monitor by iMoneyNet.

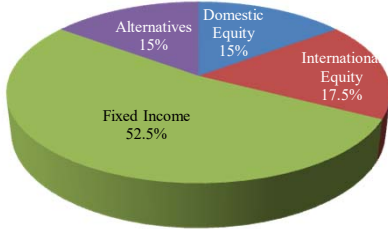
### Appendix F

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# **Attachment C**

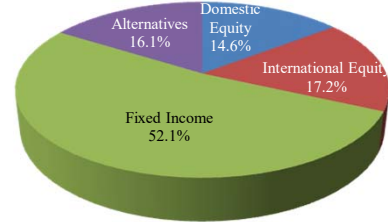
## **Asset Allocation and Performance PrePaid529 Program June 30, 2019**

## Target Allocation

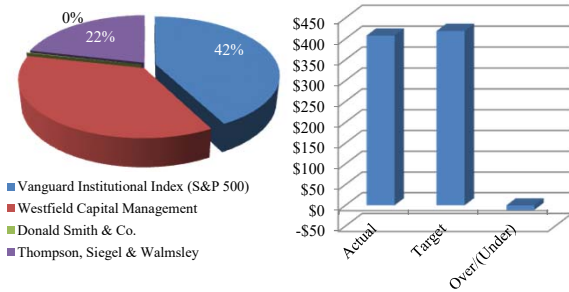


Asset Class	Over/(Under) Target	
	Dollars	% of Total Fund
Equity	(19,625,757)	-0.7%
Fixed Income	(11,834,306)	-0.4%
Alternatives	31,460,064	1.1%

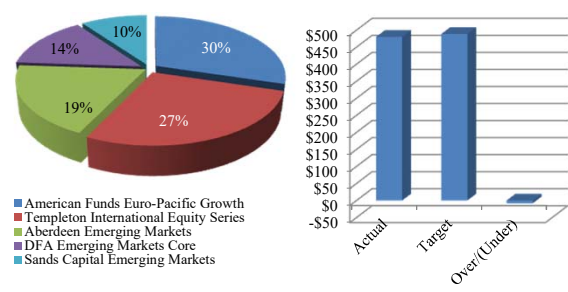
## Actual



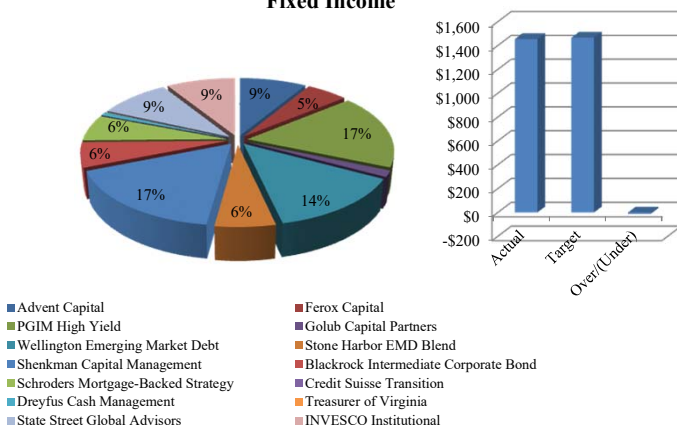
### Domestic Equity



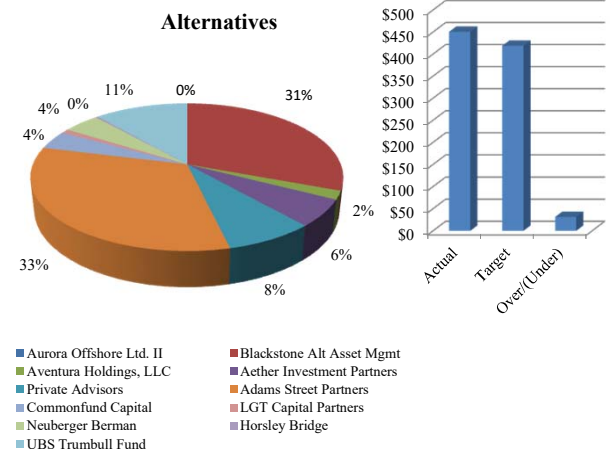
### International Equity



### Fixed Income



### Alternatives





	Current Market Value	Current Allocation	Since Inception	10 Years	5 Years	3 Years	1 Year	Calendar YTD	3 Month	1 Month	Inception Date
<b>Total Fund</b>	<b>\$2,791,832,473</b>	<b>100.0%</b>	<b>6.18%</b>	<b>7.87%</b>	<b>4.34%</b>	<b>6.90%</b>	<b>4.92%</b>	<b>8.96%</b>	<b>2.36%</b>	<b>3.24%</b>	<b>Oct-97</b>
Total Fund Benchmark <sup>1</sup>			5.64%	8.03%	5.05%	7.85%	6.85%	9.93%	3.44%	3.55%	Oct-97
<b>Total Equity</b>	<b>\$888,018,184</b>	<b>31.8%</b>	<b>6.78%</b>	<b>10.19%</b>	<b>4.34%</b>	<b>9.85%</b>	<b>1.26%</b>	<b>14.31%</b>	<b>2.37%</b>	<b>6.21%</b>	<b>Oct-97</b>
Total Equity Benchmark <sup>2</sup>			5.74%	10.44%	6.31%	12.11%	5.08%	15.57%	3.28%	6.54%	Oct-97
<b>Total Domestic Equity</b>	<b>\$407,760,587</b>	<b>14.6%</b>	<b>7.72%</b>	<b>13.09%</b>	<b>6.56%</b>	<b>11.07%</b>	<b>0.83%</b>	<b>16.89%</b>	<b>2.81%</b>	<b>6.25%</b>	<b>Oct-97</b>
Domestic Equity Benchmark <sup>3</sup>			7.42%	14.67%	10.19%	14.02%	8.98%	18.71%	4.10%	7.02%	Oct-97
Vanguard Institutional Index S&P 500 Index (Total Return)	\$172,679,650	6.2%	5.40%	14.65%	10.69%	14.17%	10.41%	18.54%	4.30%	7.04%	Jan-00
			5.65%	14.70%	10.71%	14.19%	10.42%	18.54%	4.30%	7.05%	Jan-00
Westfield Capital Management Russell 2500 Growth	\$147,290,520	5.3%	11.40%	15.46%	8.11%	16.26%	1.65%	21.08%	4.12%	6.91%	Oct-03
			10.63%	15.67%	9.98%	16.14%	6.13%	23.92%	4.14%	7.78%	Oct-03
Thompson, Siegel and Walmsley TSW Custom Benchmark <sup>A</sup>	\$87,225,248	3.1%	9.70%	12.18%	4.06%	5.36%	-4.69%	14.36%	1.53%	5.12%	Oct-03
			8.87%	13.05%	5.55%	8.98%	-1.92%	15.26%	1.89%	6.47%	Oct-03
Donald Smith and Company Russell 2000 Value	\$565,169	0.0%	9.50%	8.91%	-0.11%	4.47%	-6.44%	9.54%	-0.04%	6.28%	Oct-03
			8.47%	12.40%	5.39%	9.81%	-6.24%	13.47%	1.38%	6.37%	Oct-03
<b>Total International Equity</b>	<b>\$480,257,597</b>	<b>17.2%</b>	<b>5.90%</b>	<b>6.88%</b>	<b>2.35%</b>	<b>8.62%</b>	<b>1.56%</b>	<b>12.26%</b>	<b>1.99%</b>	<b>6.17%</b>	<b>Oct-97</b>
International Equity Benchmark <sup>4</sup>			5.01%	6.82%	2.90%	10.32%	1.66%	12.90%	2.58%	6.12%	Oct-97
<b>Developed Markets Equity (EAFE)</b>	<b>\$274,314,620</b>	<b>9.8%</b>	<b>5.84%</b>	<b>6.86%</b>	<b>2.12%</b>	<b>8.68%</b>	<b>-2.12%</b>	<b>12.00%</b>	<b>1.81%</b>	<b>6.18%</b>	<b>Oct-97</b>
MSCI EAFE			4.78%	7.40%	2.74%	9.65%	1.60%	14.49%	3.97%	5.97%	Oct-97
Capital Research EuroPacific Growth MSCI ACWI Ex US	\$142,923,733	5.1%	7.75%	8.14%	4.45%	10.83%	1.91%	17.59%	3.87%	6.64%	Nov-01
			6.60%	6.54%	2.16%	9.39%	1.29%	13.60%	2.98%	6.02%	Nov-01
			7.14%	7.98%	4.38%	10.21%	3.03%	17.53%	4.55%	6.68%	Nov-01
Templeton International Equity MSCI ACWI Ex US (Custom) <sup>B</sup>	\$131,390,887	4.7%	5.14%	5.41%	-0.29%	6.38%	-6.27%	6.25%	-0.36%	5.69%	Aug-97
			4.54%	6.54%	2.16%	9.39%	1.29%	13.60%	2.98%	6.02%	Aug-97
<b>Emerging Markets Equity</b>	<b>\$205,942,977</b>	<b>7.4%</b>	<b>5.67%</b>		<b>2.35%</b>	<b>8.43%</b>	<b>6.57%</b>	<b>12.66%</b>	<b>2.23%</b>	<b>6.16%</b>	<b>Nov-09</b>
MSCI EM (Emerging Markets)			4.29%		2.87%	11.06%	1.61%	10.76%	0.74%	6.32%	Nov-09
Aberdeen Emerging Markets Equity MSCI EM (Emerging Markets)	\$91,129,483	3.3%	5.70%		2.41%	8.20%	10.15%	14.82%	3.59%	6.86%	Nov-09
			4.29%		2.87%	11.06%	1.61%	10.76%	0.74%	6.32%	Nov-09
DFA Emerging Markets Core MSCI EM (Emerging Markets)	\$67,392,716	2.4%	10.63%			9.11%	1.30%	9.54%	0.86%	5.61%	Jan-16
			11.43%			11.06%	1.61%	10.76%	0.74%	6.32%	Jan-16
Sands Emerging Markets Growth MSCI EM (Emerging Markets)	\$47,420,778	1.7%	5.29%							5.29%	Jun-19
			6.32%							6.32%	Jun-19



	Current Market Value	Current Allocation	Since Inception	10 Years	5 Years	3 Years	1 Year	Calendar YTD	3 Month	1 Month	Inception Date	
<b>Total Fixed Income</b>	<b>\$1,453,441,637</b>	<b>52.1%</b>	<b>5.45%</b>	<b>5.54%</b>	<b>3.35%</b>	<b>4.35%</b>	<b>6.15%</b>	<b>7.18%</b>	<b>2.64%</b>	<b>1.81%</b>	<b>Oct-97</b>	
<i>Fixed Income Benchmark<sup>5</sup></i>			5.34%	5.32%	3.46%	4.88%	7.73%	8.12%	3.14%	2.27%	Oct-97	
<b>Non-Core Fixed Income</b>	<b>\$1,002,475,915</b>	<b>35.9%</b>	<b>5.23%</b>	<b>7.18%</b>	<b>3.77%</b>	<b>5.21%</b>	<b>6.59%</b>	<b>8.43%</b>	<b>2.88%</b>	<b>2.30%</b>	<b>May-05</b>	
<i>Non-Core Fixed Income Benchmark<sup>6</sup></i>			5.79%	8.24%	4.29%	7.15%	7.99%	9.84%	3.23%	3.24%	May-05	
<b>Bank Loans</b>	<b>\$243,763,773</b>	<b>8.7%</b>	<b>3.30%</b>		<b>3.02%</b>	<b>4.88%</b>	<b>3.33%</b>	<b>5.56%</b>	<b>1.50%</b>	<b>0.23%</b>	<b>Sep-13</b>	
<i>Credit Suisse Leveraged Loans</i>			4.15%		3.85%	5.43%	4.15%	5.42%	1.58%	0.22%	Sep-13	
Shenkman Capital Management	\$243,763,773	8.7%	3.30%		3.02%	4.88%	3.33%	5.56%	1.50%	0.23%	Sep-13	
<i>Credit Suisse Leveraged Loans</i>			4.15%		3.85%	5.43%	4.15%	5.42%	1.58%	0.22%	Sep-13	
<b>High Yield</b>	<b>\$252,195,826</b>	<b>9.0%</b>	<b>7.30%</b>		<b>5.56%</b>	<b>7.63%</b>	<b>9.15%</b>	<b>11.12%</b>	<b>3.56%</b>	<b>2.69%</b>	<b>Nov-09</b>	
<i>Bloomberg Barclays US Corp High Yield</i>			7.88%		4.70%	7.52%	7.48%	9.94%	2.50%	2.28%	Nov-09	
PGIM High Yield	\$252,195,826	9.0%	7.30%		5.56%	7.63%	9.15%	11.12%	3.56%	2.69%	Nov-09	
<i>Bloomberg Barclays US HY Ba/B 1% Issuer</i>			7.48%		4.70%	7.03%	8.61%	10.28%	2.85%	2.50%	Nov-09	
<b>Emerging Markets Debt</b>	<b>\$280,961,262</b>	<b>10.1%</b>	<b>5.53%</b>		<b>3.52%</b>	<b>4.33%</b>	<b>10.13%</b>	<b>10.68%</b>	<b>4.55%</b>	<b>4.02%</b>	<b>Dec-09</b>	
<i>Emerging Markets Debt Benchmark<sup>7</sup></i>			4.66%		2.46%	4.91%	10.77%	10.03%	4.86%	4.45%	Dec-09	
Wellington Management	\$198,293,954	7.1%	6.60%		4.46%	4.51%	10.85%	10.81%	4.58%	3.88%	Dec-09	
<i>JPMorgan EMBI Global Diversified</i>			6.89%		5.30%	5.47%	12.45%	11.31%	4.08%	3.40%	Dec-09	
Stone Harbor	\$82,667,307	3.0%	1.99%		1.16%	3.89%	8.45%	10.38%	4.47%	4.36%	Apr-11	
<i>Stone Harbor Custom Benchmark<sup>c</sup></i>			3.54%		2.46%	4.91%	10.77%	10.03%	4.86%	4.45%	Apr-11	
<b>Convertible Bonds</b>	<b>\$204,555,054</b>	<b>7.3%</b>	<b>5.12%</b>		<b>7.02%</b>	<b>2.51%</b>	<b>3.61%</b>	<b>2.73%</b>	<b>6.10%</b>	<b>1.44%</b>	<b>1.88%</b>	<b>May-05</b>
<i>Merrill Lynch Global 300 Convertibles</i>			7.08%		8.78%	6.00%	9.45%	4.74%	9.38%	2.00%	2.90%	May-05
Advent Cap Mgt	\$126,411,043	4.5%	3.25%		2.45%	3.56%	3.10%	6.94%	2.00%	2.30%	Sep-13	
<i>TR Global Defensive Inv Gr USDH Index</i>			2.33%		2.02%	2.54%	4.68%	5.86%	2.81%	1.82%	Sep-13	
Ferox Cap	\$78,144,011	2.8%	3.21%		2.57%	3.67%	2.13%	4.76%	0.55%	1.20%	Aug-13	
<i>TR Global Defensive Inv Gr USDH Index</i>			2.32%		2.02%	2.54%	4.68%	5.86%	2.81%	1.82%	Aug-13	
<b>Private Debt</b>	<b>\$21,000,000</b>	<b>0.8%</b>	<b>9.85%</b>					<b>3.73%</b>	<b>3.43%</b>	<b>0.00%</b>	<b>May-18</b>	
<i>S&amp;P LSTA Leveraged Loan (1Q in Arrears)</i>			2.96%					0.40%	4.00%	-0.17%	May-18	
Golub Capital	\$21,000,000	0.8%	9.85%				9.92%	3.73%	3.43%	0.00%	May-18	
<i>S&amp;P LSTA Leveraged Loan (1Q in Arrears)</i>			2.96%				2.97%	0.40%	4.00%	-0.17%	May-18	





	Current Market Value	Current Allocation	Since Inception	10 Years	5 Years	3 Years	1 Year	Calendar YTD	3 Month	1 Month	Inception Date
<b>Core Fixed Income</b>	<b>\$450,965,722</b>	<b>16.2%</b>	<b>4.75%</b>	<b>3.93%</b>	<b>2.39%</b>	<b>2.48%</b>	<b>5.14%</b>	<b>4.48%</b>	<b>2.11%</b>	<b>0.75%</b>	<b>Oct-97</b>
<i>Core Fixed Income Benchmark<sup>a</sup></i>			4.66%	3.42%	2.50%	2.41%	7.33%	6.23%	3.02%	1.22%	Oct-97
<b>TIPS</b>	<b>\$135,366,937</b>	<b>4.8%</b>	<b>3.70%</b>	<b>3.67%</b>	<b>1.69%</b>	<b>2.02%</b>	<b>4.78%</b>	<b>6.15%</b>	<b>2.84%</b>	<b>0.85%</b>	<b>May-05</b>
<i>Bloomberg Barclays US TIPS</i>			3.74%	3.64%	1.76%	2.08%	4.84%	6.15%	2.86%	0.86%	May-05
SSgA TIPS	\$135,366,937	4.8%	2.86%		1.69%	2.02%	4.78%	6.15%	2.84%	0.85%	Dec-10
<i>Bloomberg Barclays US TIPS</i>			2.75%		1.76%	2.08%	4.84%	6.15%	2.86%	0.86%	Dec-10
<b>Intermediate Credit</b>	<b>\$84,158,043</b>	<b>3.0%</b>	<b>3.77%</b>		<b>3.23%</b>	<b>2.97%</b>	<b>8.22%</b>	<b>6.70%</b>	<b>2.99%</b>	<b>1.50%</b>	<b>Nov-13</b>
<i>Bloomberg Barclays Intermediate Credit</i>			3.28%		3.10%	3.01%	8.23%	6.65%	2.99%	1.49%	Nov-13
Blackrock Intermediate Corp Bond	\$84,158,043	3.0%	3.11%			2.97%	8.22%	6.70%	2.99%	1.50%	Jun-15
<i>Bloomberg Barclays Intermediate Credit</i>			3.19%			3.01%	8.23%	6.65%	2.99%	1.49%	Jun-15
<b>Core Bonds</b>	<b>\$231,440,741</b>	<b>8.3%</b>	<b>4.76%</b>	<b>3.94%</b>	<b>2.46%</b>	<b>2.52%</b>	<b>4.25%</b>	<b>2.72%</b>	<b>1.37%</b>	<b>0.43%</b>	<b>Oct-97</b>
<i>Bloomberg Barclays US Aggregate Bond</i>			5.00%	3.90%	2.95%	2.31%	7.87%	6.11%	3.08%	1.26%	Oct-97
Schroders MBS	\$88,915,880	3.2%	3.65%			3.16%	7.29%	5.14%	2.61%	0.78%	Oct-14
<i>Bloomberg Barclays US Securitized</i>			2.70%			2.10%	6.37%	4.31%	2.04%	0.73%	Oct-14
Invesco Advisers	\$129,939,786	4.7%	3.84%	2.66%	2.19%	2.31%	2.50%	1.24%	0.63%	0.21%	Jan-00
<i>Stable Value Custom Benchmark<sup>d</sup></i>			2.97%	1.46%	1.84%	2.36%	3.30%	1.70%	0.86%	0.28%	Jan-00
Dreyfus Money Market	\$12,261,812	0.4%	0.46%		0.80%	1.29%	2.30%	1.22%	0.60%	0.20%	Apr-10
<i>Citigroup 3-Month T-Bill</i>			0.49%		0.84%	1.36%	2.30%	1.21%	0.61%	0.20%	Apr-10

	Current Market Value	Current Allocation	Since Inception	10 Years	5 Years	3 Years	1 Year	Calendar YTD	3 Month	1 Month	Inception Date
<b>Alternatives</b>	<b>\$450,372,652</b>	<b>16.1%</b>	<b>5.47%</b>	<b>10.31%</b>	<b>7.63%</b>	<b>9.33%</b>	<b>8.36%</b>	<b>4.56%</b>	<b>1.44%</b>	<b>2.21%</b>	<b>May-05</b>
Alternatives Benchmark <sup>9</sup>			5.65%	11.99%	7.13%	8.46%	6.02%	3.68%	4.31%	1.53%	May-05
<b>Hedge Funds</b>	<b>\$137,915,045</b>	<b>4.9%</b>	<b>2.97%</b>		<b>2.95%</b>	<b>3.97%</b>	<b>2.80%</b>	<b>2.80%</b>	<b>1.04%</b>	<b>-0.21%</b>	<b>Mar-10</b>
HFRI FOF Conservative Index			2.78%		2.17%	3.89%	2.35%	4.95%	1.71%	0.95%	Mar-10
Blackstone Offshore <sup>E</sup>	\$137,872,844	4.9%	5.34%				2.87%	2.80%	1.04%	-0.21%	Oct-16
HFRI FOF Conservative Index			3.56%				2.35%	4.95%	1.71%	0.95%	Oct-16
T-BILLS + 4%			5.45%				6.30%	3.17%	1.58%	0.52%	Oct-16
<b>Core Real Estate</b>	<b>\$59,760,803</b>	<b>2.1%</b>	<b>7.19%</b>	<b>12.86%</b>	<b>7.92%</b>	<b>5.98%</b>	<b>6.03%</b>	<b>2.72%</b>	<b>1.14%</b>	<b>0.98%</b>	<b>May-05</b>
NCREIF NFI ODCE Net (1Q in Arrears)			6.91%	7.73%	9.18%	7.01%	6.55%	2.74%	1.20%	1.20%	May-05
Aventura	\$8,354,625	0.3%	5.17%	5.46%	9.22%	8.11%	11.04%	7.15%	5.27%	4.04%	Apr-08
NCREIF Property Index (1Q in Arrears)			6.17%	8.51%	9.13%	7.07%	6.83%	3.20%	1.80%	0.60%	Apr-08
UBS Trumbull Fund (1Q in Arrears)	\$51,406,178	1.8%	8.84%		7.72%	5.66%	5.25%	2.03%	0.49%	0.49%	Jun-11
NCREIF NFI ODCE Net (1Q in Arrears)			10.62%		9.18%	7.01%	6.55%	2.74%	1.20%	1.20%	Jun-11
<b>Private Equity</b>	<b>\$252,696,805</b>	<b>9.1%</b>	<b>5.09%</b>		<b>11.48%</b>	<b>15.19%</b>	<b>12.61%</b>	<b>6.16%</b>	<b>1.82%</b>	<b>3.88%</b>	<b>Oct-10</b>
Private Equity Benchmark <sup>10</sup>			4.87%		9.92%	14.51%	8.87%	3.07%	10.13%	2.43%	Oct-10

Performance Returns are calculated by BNY Mellon Asset Servicing. They are presented net of fees for separate account asset management services.

The Inception Date for the Program is 10/1/97. However, individual managers within the Program will have varying inception dates based upon when they were hired.

<sup>1</sup> Total Fund Benchmark: 15% Russell 3000, 10% MSCI EAFE, 7.5% MSCI EM, 5% NCREIF ODCE (1Q in Arrears), 5% HFRI Fund of Funds Conservative, 5% Private Equity Benchmark 7.5% BofAML Global 300 Convertibles, 10% Bloomberg Barclays US High Yield, 5% JPMorgan EMBI Global Diversified, 5% JPMorgan GBI EM Global Diversified USD 15% Bloomberg Barclays U.S. Aggregate Bond Index, 5% Bloomberg Barclays TIPS Index, 5% Bloomberg Barclays Intermediate Credit

<sup>2</sup> Total Equity Benchmark: 46.2% Russell 3000, 30.8% MSCI EAFE, 23.0% MSCI EM

<sup>3</sup> Domestic Equity Benchmark: Russell 3000

<sup>4</sup> International Equity Benchmark: 57% MSCI EAFE, 43% MSCI EM

<sup>5</sup> Fixed Income Benchmark: 52% Non-Core Fixed Income Benchmark, 48% Core Fixed Income Benchmark

<sup>6</sup> Non-Core Fixed Income Benchmark: 27.3% BofAML Global 300 Convertibles, 36.3% BB US High Yield, 18.2% JPMorgan EMBI Global Diversified, 18.2% JPMorgan GBI EM Global Div

<sup>7</sup> Emerging Markets Debt Benchmark is comprised of 50% JPMorgan EMBI Global Diversified Index/50% JPMorgan GBI-EM Global Diversified

<sup>8</sup> Core Fixed Income Benchmark: 60% Bloomberg Barclays U.S. Aggregate Bond Index, 20% Bloomberg Barclays TIPS Index, 20% Bloomberg Barclays Intermediate Credit

<sup>9</sup> Alternatives Benchmark: 33.3% NCREIF ODCE (1Q in Arrears), 33.3% HFRI Fund of Funds Conservative Index, 33.4% Private Equity Benchmark

<sup>10</sup> Private Equity Benchmark consists of actual returns for first 4 years of each partnership, then MSCI ACWI IMI + 3%. One quarter lag due to valuations.

<sup>A</sup> TSW Custom Benchmark defined as Russell 2000 Value Index through February 28, 2011; Russell 2500 Value Index thereafter

<sup>B</sup> MSCI ACWI Ex US (Custom) Benchmark defined as MSCI ACWI Ex US (Gross) until 12/31/2000, MSCI ACWI Ex US (Net) thereafter

<sup>C</sup> Stone Harbor Custom Benchmark is comprised of 50% JPMorgan EMBI Global Diversified Index/50% JPMorgan GBI-EM Global Diversified

<sup>D</sup> Stable Value Custom Benchmark defined as Ryan Labs GIC 3 yr until 12/31/08 then CG 3-Month US T-Bill + 1%

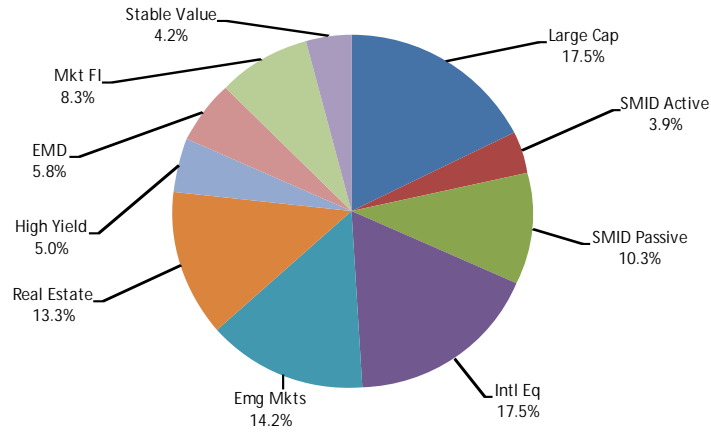
<sup>E</sup> Performance returns for the Blackstone Offshore Fund are presented with a one-month lag due to the availability of valuation of the investment vehicle

# **Attachment D**

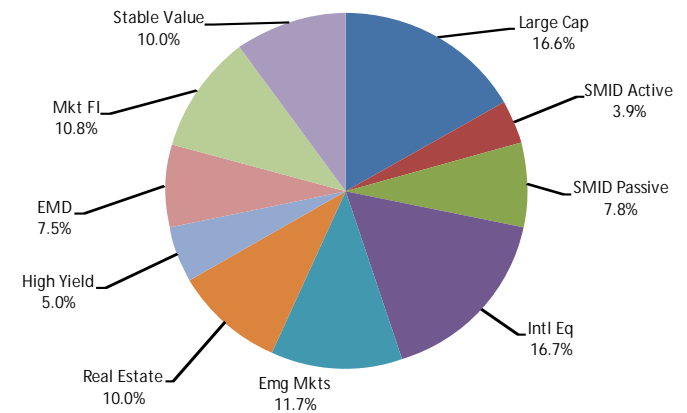
## **Asset Allocation and Performance Invest529 Program June 30, 2019**

## Fund Profile - Age-Based Portfolio

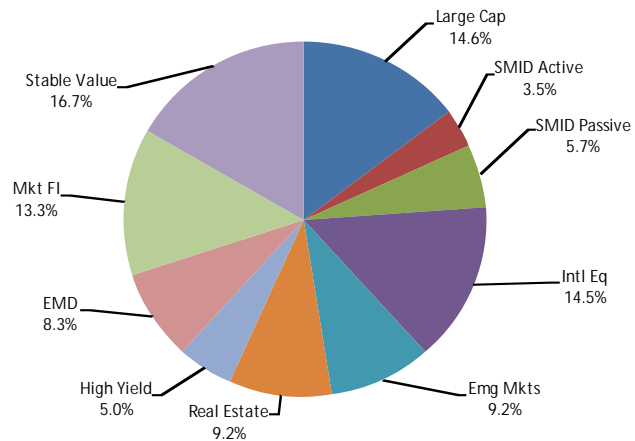
2036 Portfolio



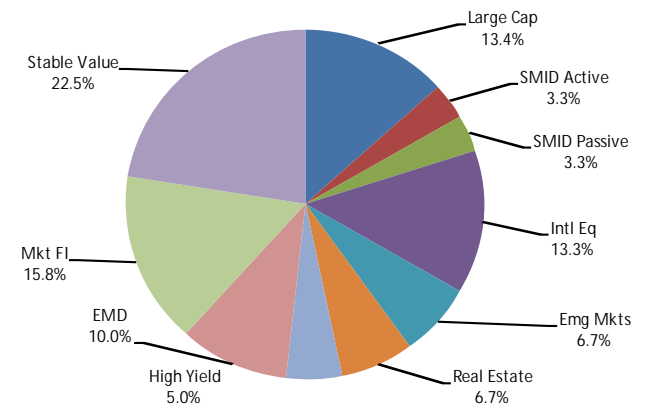
2033 Portfolio



2030 Portfolio

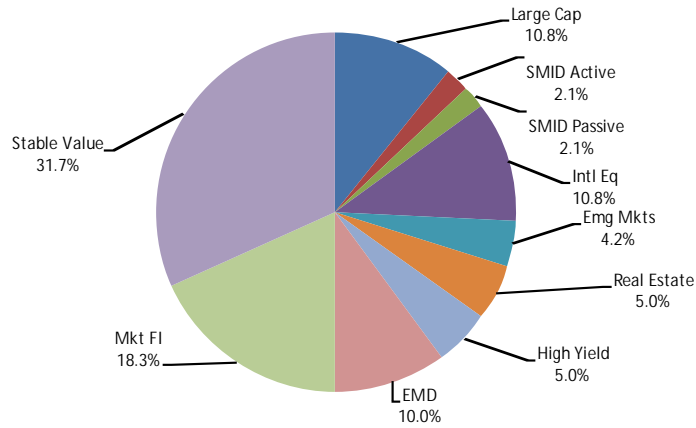


2027 Portfolio

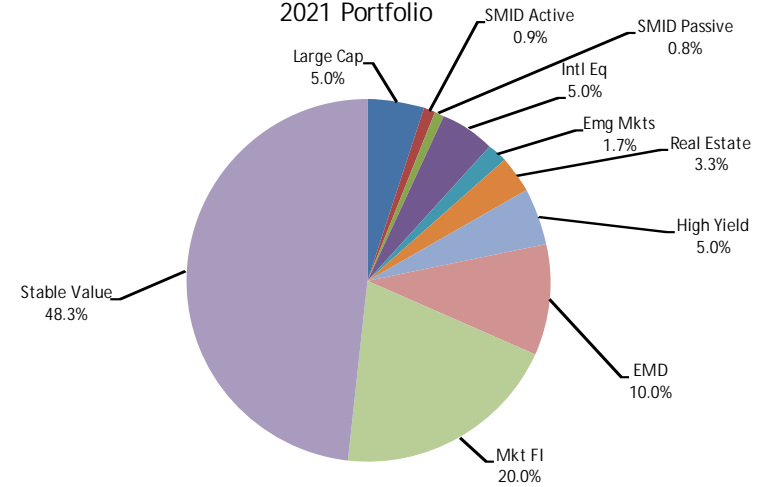


## Fund Profile - Age-Based Portfolio

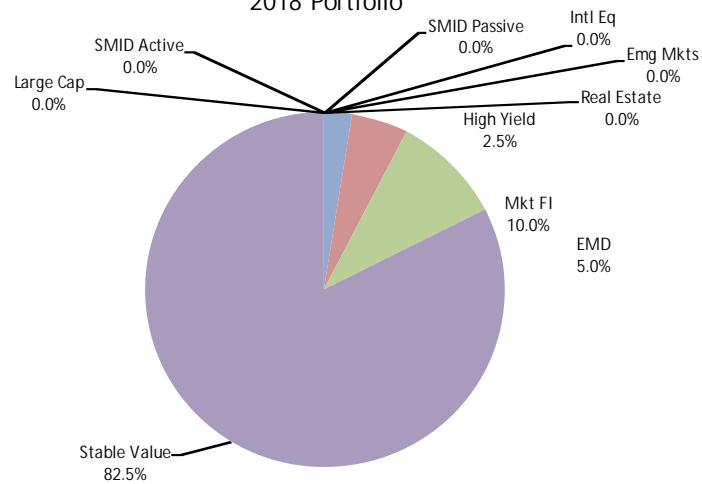
2024 Portfolio



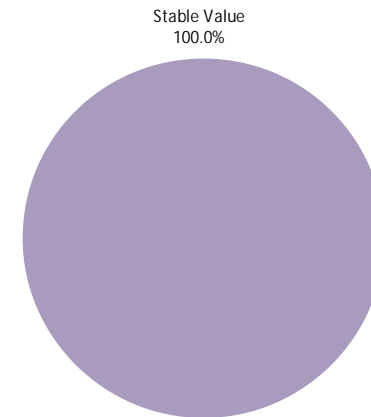
2021 Portfolio

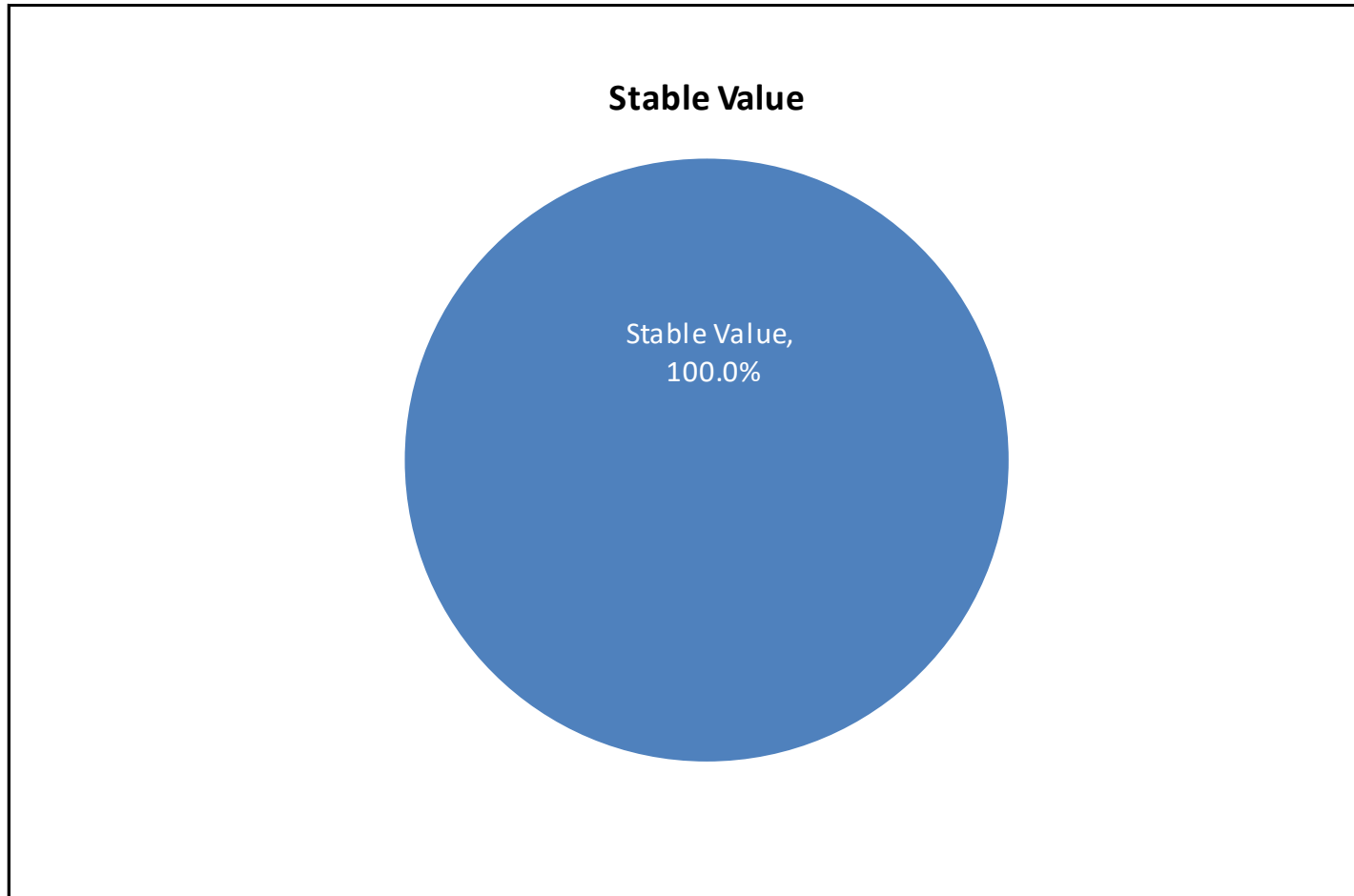


2018 Portfolio

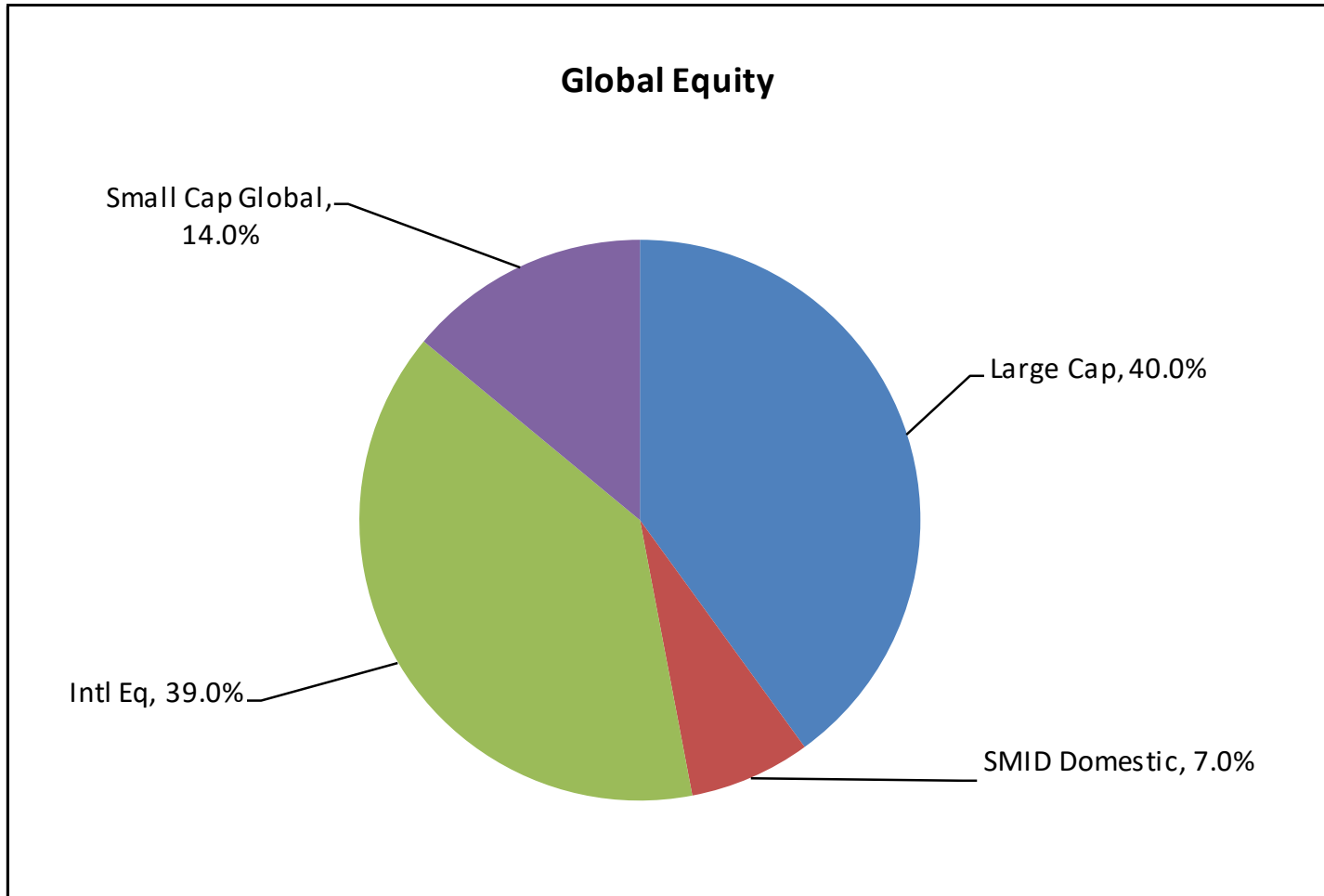


2015 Portfolio



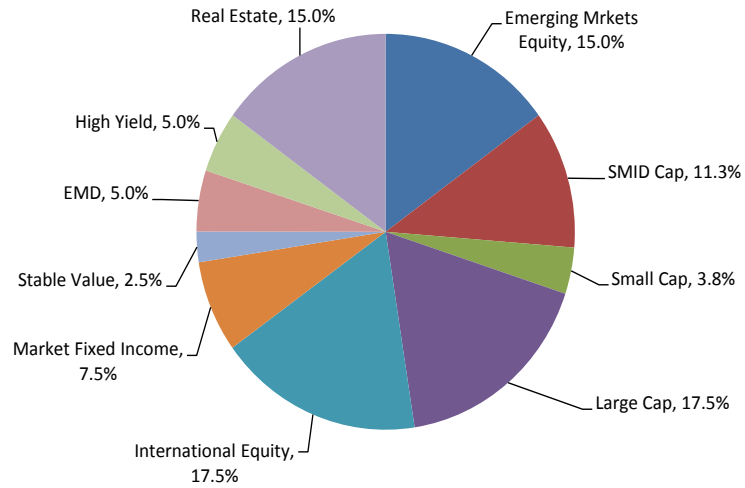


Fund Profile - Actively-Managed Static Portfolio

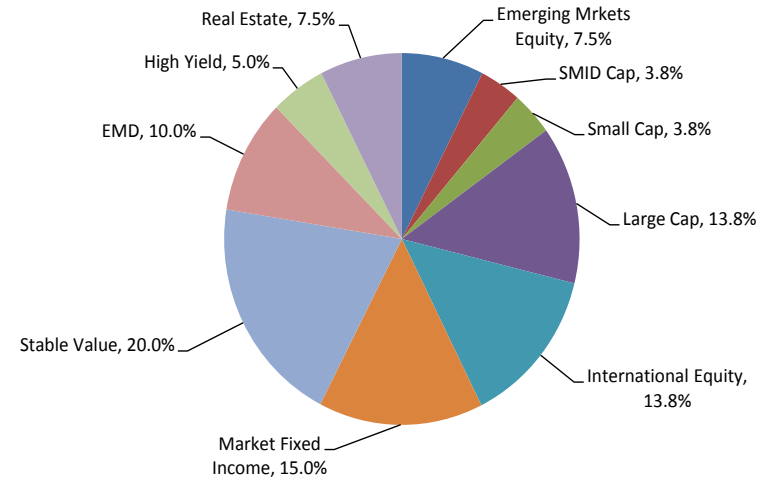


Fund Profile - Actively-Managed Static Portfolio

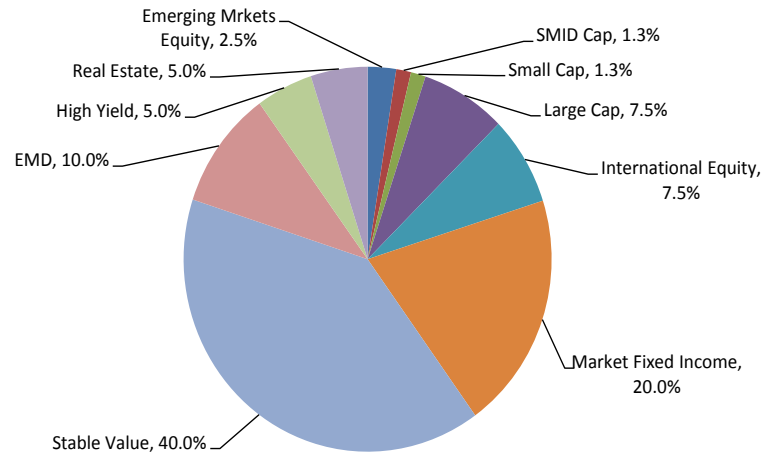
**Active Aggressive**



**Active Moderate**



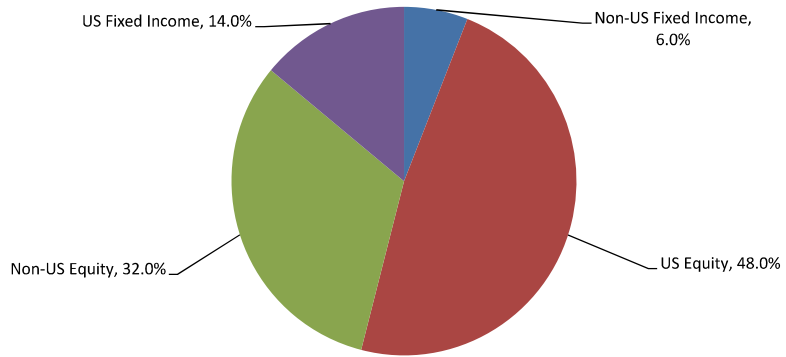
**Active Conservative**



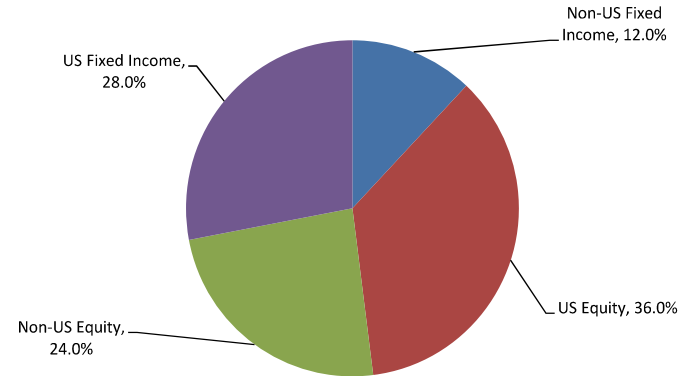


Fund Profile - Passively-Managed Static Portfolio

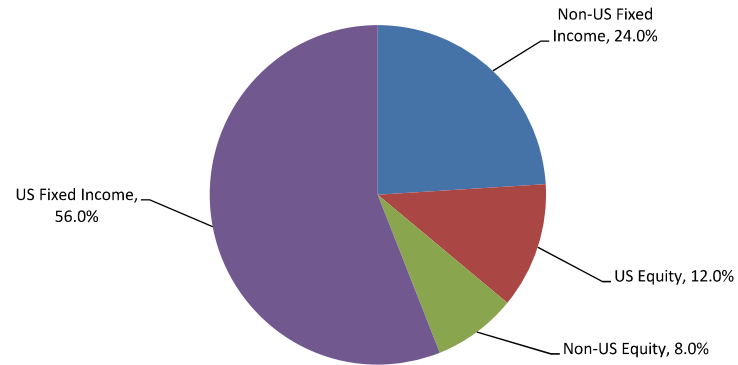
Aggressive Growth



Moderate Growth



Conservative Income



	Month Ending	Quarter Ending	Cal Year Ending	1 Year Ending	3 Year Ending	5 Year Ending	10 Year Ending	Inception Ending	Inception Date
<b>AGE-BASED PORTFOLIOS - Underlying Managers</b>									
<b>Large Cap Domestic Equity</b>									
<b>Vanguard Institutional Index</b>	<b>7.04</b>	<b>4.30</b>	<b>18.54</b>	<b>10.41</b>	<b>14.18</b>	<b>10.76</b>	<b>14.73</b>	<b>5.67</b>	<b>Jan-00</b>
<i>S&amp;P 500</i>	7.05	4.30	18.54	10.42	14.19	10.71	14.70	5.65	
<b>Small/Mid Cap Domestic Equity</b>									
<b>Rothschild Asset Management</b>	<b>6.14</b>	<b>1.15</b>	<b>15.59</b>	<b>-0.74</b>	<b>11.54</b>	<b>8.34</b>	<b>14.34</b>	<b>10.66</b>	<b>Jan-00</b>
<i>Russell 2500</i>	7.09	2.96	19.25	1.77	12.34	7.66	14.44	8.53	
<b>Vanguard Small Cap Index</b>	<b>7.07</b>	<b>2.91</b>	<b>19.43</b>	<b>2.31</b>	<b>12.38</b>	<b>7.84</b>	<b>14.84</b>	<b>8.47</b>	<b>Jan-00</b>
<i>Custom Small Cap Index<sup>1</sup></i>	7.04	2.86	19.54	2.29	12.37	7.70	14.75	8.35	
<b>International Equity</b>									
<b>TIF International Equity Series</b>	<b>5.69</b>	<b>-0.36</b>	<b>6.26</b>	<b>-6.26</b>	<b>6.38</b>	<b>-0.20</b>	<b>5.46</b>	<b>4.26</b>	<b>Jan-00</b>
<i>Templeton Custom BM<sup>6</sup></i>	6.02	2.98	13.60	1.29	9.39	2.16	6.54	3.59	
<b>Am. Funds Euro-Pacific Growth</b>	<b>6.64</b>	<b>3.87</b>	<b>17.59</b>	<b>1.91</b>	<b>10.83</b>	<b>4.53</b>	<b>8.21</b>	<b>8.96</b>	<b>Jan-03</b>
<i>MSCI ACWI Ex US</i>	6.02	2.98	13.60	1.29	9.39	2.16	6.54	7.76	
<b>Aberdeen Emerging Markets Fund</b>	<b>6.86</b>	<b>3.59</b>	<b>14.82</b>	<b>10.16</b>	<b>8.29</b>	<b>2.46</b>		<b>2.85</b>	<b>Jan-11</b>
<i>MSCI Emerging Markets</i>	6.32	0.74	10.76	1.61	11.06	2.87		1.78	
<b>DFA Emerging Markets Core Fund</b>	<b>5.61</b>	<b>0.86</b>	<b>9.54</b>	<b>1.30</b>	<b>9.04</b>			<b>9.06</b>	<b>Apr-16</b>
<i>MSCI Emerging Markets</i>	6.32	0.74	10.76	1.61	11.06			10.44	
<b>Private Real Estate</b>									
<b>UBS Trumbull Fund (1Q in Arrears)</b>	<b>0.49</b>	<b>0.49</b>	<b>2.03</b>	<b>4.90</b>				<b>5.29</b>	<b>Apr-18</b>
<i>NCREIF NFI ODCE (1Q in Arrears)</i>	1.20	1.20	2.74	6.55				6.86	
<b>Blackstone Property Partners</b>	<b>1.69</b>	<b>1.69</b>	<b>3.28</b>	<b>6.06</b>				<b>5.18</b>	<b>Jun-18</b>
<i>NCREIF NFI ODCE (1Q in Arrears)</i>	1.20	1.20	2.74	6.55				7.37	
<b>Fixed Income</b>									
<b>Invesco Advisers</b>	<b>0.21</b>	<b>0.63</b>	<b>1.23</b>	<b>2.44</b>	<b>2.09</b>	<b>1.92</b>	<b>2.39</b>	<b>3.76</b>	<b>Jan-00</b>
<i>Stable Value Custom Benchmark</i>	0.28	0.86	1.70	3.30	2.36	1.84	1.46	2.97	
<b>Stone Harbor Emerging Market Debt</b>	<b>3.29</b>	<b>3.08</b>	<b>12.35</b>	<b>10.60</b>	<b>4.95</b>	<b>4.18</b>		<b>4.85</b>	<b>Jan-11</b>
<i>JP Morgan EMBI Global Diversified</i>	3.40	4.08	11.31	12.45	5.47	5.30		6.30	
<b>PGIM High Yield Bond Fund</b>	<b>2.66</b>	<b>3.25</b>	<b>10.60</b>	<b>8.90</b>	<b>7.54</b>	<b>5.52</b>		<b>6.21</b>	<b>Jan-11</b>
<i>Bloomberg Barclays US HY Ba/B 1% Issuer</i>	2.50	2.85	10.28	8.61	7.03	4.70		6.55	

	Month Ending	Quarter Ending	Cal Year Ending	1 Year Ending	3 Year Ending	5 Year Ending	10 Year Ending	Inception Ending	Inception Date
<b>STATIC PORTFOLIOS - Underlying Funds</b>									
<b>Parnassus Core Equity</b>	<b>6.86</b>	<b>6.14</b>	<b>20.33</b>	<b>17.44</b>	<b>14.58</b>	<b>10.41</b>		<b>13.39</b>	<b>Nov-09</b>
<i>S&amp;P 500</i>	7.05	4.30	18.54	10.42	14.19	10.71		13.75	
<b>Van. Total Stock Market Fund</b>	<b>6.99</b>	<b>4.09</b>	<b>18.72</b>	<b>9.01</b>	<b>14.06</b>	<b>10.19</b>	<b>14.72</b>	<b>8.82</b>	<b>Aug-05</b>
<i>Custom Total Stock Index<sup>2</sup></i>	6.99	4.08	18.71	9.00	14.04	10.18	14.72	8.81	
<b>Van. Total Bond Market Fund</b>	<b>1.15</b>	<b>3.07</b>	<b>6.12</b>	<b>7.87</b>	<b>2.24</b>	<b>2.93</b>	<b>3.86</b>	<b>4.12</b>	<b>Sep-05</b>
<i>Custom Total Bond Index<sup>3</sup></i>	1.29	3.15	6.25	7.97	2.32	2.96	3.90	4.11	
<b>Van. Total Int'l Equity Fund</b>	<b>5.83</b>	<b>2.75</b>	<b>13.30</b>	<b>0.63</b>	<b>8.99</b>	<b>2.34</b>	<b>6.62</b>	<b>4.66</b>	<b>Sep-05</b>
<i>Custom Int'l Stock Index<sup>4</sup></i>	5.83	2.99	13.58	0.81	9.51	2.70	6.98	4.48	
<b>Van. Infl. Protected Sec. Fund</b>	<b>0.83</b>	<b>2.79</b>	<b>6.09</b>	<b>4.72</b>	<b>1.93</b>	<b>1.72</b>	<b>3.59</b>	<b>3.64</b>	<b>Sep-05</b>
<i>Bloomberg Barclays Cap. Treas Infl. Note</i>	0.86	2.86	6.15	4.84	2.08	1.76	3.64	3.74	
<b>Van. Real Estate Index</b>	<b>1.71</b>	<b>1.76</b>	<b>19.35</b>	<b>12.25</b>	<b>4.07</b>	<b>7.73</b>	<b>15.50</b>	<b>7.51</b>	<b>Sep-05</b>
<i>Custom Real Estate Index<sup>7</sup></i>	1.55	1.47	18.69	10.89	3.51	7.42	15.34	7.21	
<b>Van. International Bond Index Fund</b>	<b>1.60</b>	<b>2.95</b>	<b>6.10</b>	<b>7.87</b>				<b>6.81</b>	<b>Feb-18</b>
<i>Bloomberg Barclays Global Aggregate ex-USD</i>	1.63	2.98	6.19	8.02				6.96	
<i>Float Adjusted RIC Capped Index (USD Hedged)</i>									
<b>Am. Funds SMALLCAP World Fund</b>	<b>5.10</b>	<b>4.28</b>	<b>10.48</b>					<b>10.48</b>	<b>Feb-19</b>
<i>MSCI All Country World Small Cap</i>	5.62	1.69	4.75					4.75	

Notes: Performance Returns are calculated by BNY Mellon Asset Servicing. They are presented net of fees for separate account asset management services.

1. Russell 2000 Index through May 2003; MSCI US Small Cap 1750 Index through June 2013; CRSP US Small Cap Index thereafter.
2. MSCI US Broad Market Index through June 2013; and CRSP US Total Market Index thereafter.
3. Barclays U.S. Aggregate Bond Index through June 2013; Bloomberg Barclays U.S. Aggregate Float Adjusted Index thereafter.
4. MSCI EAFE Index through June 2013 and FTSE Global All Cap ex US Index thereafter.
6. Templeton Custom Benchmark: MSCI ACWI Ex US (Gross) until 12/31/2000, MSCI ACWI Ex US (Net) thereafter.
7. MSCI US REIT through January 2018; MSCI US Investable Market Real Estate 25/50 Transition Index through July 2018; MSCI US Investable Market Real Estate 25/50 Index thereafter.

	Current Month	3 Months Ending	Cal Year Ending	1 Year Ending	3 Year Ending	5 Year Ending	10 Year Ending	Inception Ending	Inception Date
<b>AGE-BASED PORTFOLIOS</b>									
<b>2036 Portfolio</b>	4.57	2.48	12.00	4.81				8.62	Jan-17
2036 Benchmark	4.81	2.72	13.10	5.71				9.43	
<b>2033 Portfolio</b>	4.23	2.48	11.32	4.77	8.41	5.11		5.86	Jan-14
2033 Benchmark	4.42	2.73	12.16	5.69	8.98	5.40		6.17	
<b>2030 Portfolio</b>	3.71	2.40	10.22	4.97	7.82	4.89		6.73	Jan-11
2030 Benchmark	3.88	2.65	11.01	5.89	8.30	5.06		6.85	
<b>2027 Portfolio</b>	3.32	2.36	9.42	5.08	7.02	4.48	8.73	5.03	Feb-08
2027 Benchmark	3.46	2.63	10.01	6.01	7.41	4.65	8.66	5.05	
<b>2024 Portfolio</b>	2.71	2.20	8.09	4.75	6.21	4.15	8.21	5.28	Aug-05
2024 Benchmark	2.83	2.47	8.57	5.66	6.50	4.29	7.91	4.98	
<b>2021 Portfolio</b>	1.68	1.83	5.79	4.27	5.00	3.49	7.49	5.46	Jan-02
2021 Benchmark	1.78	2.09	6.12	5.07	5.21	3.60	7.06	5.10	
<b>2018 Portfolio</b>	0.51	1.03	2.54	3.37	3.01	2.40	6.40	4.20	Jan-00
2018 Benchmark	0.59	1.27	2.78	4.11	3.23	2.56	5.87	3.27	
<b>2015 Portfolio</b>	0.20	0.60	1.18	2.33	1.93	1.96	5.50	3.88	Jan-00
2015 Benchmark	0.28	0.83	1.65	3.20	2.19	2.00	4.78	3.02	
<b>PASSIVELY-MANAGED STATIC PORTFOLIOS</b>									
<b>Aggressive Growth Portfolio</b>	5.47	3.50	14.41	6.21	10.07	6.46	10.36	6.21	Jan-02
Aggressive Growth Benchmark	5.49	3.60	14.58	6.34	10.32	6.47	10.43	6.51	
<b>Moderate Growth Portfolio</b>	4.42	3.43	12.35	6.75	8.23	5.75	8.87	5.80	Jan-02
Moderate Growth Benchmark	4.47	3.52	12.52	6.92	8.43	5.57	8.80	6.03	
<b>Conservative Income Portfolio</b>	2.33	3.17	8.16	7.53	4.42	4.07	5.50	4.38	Jan-02
Conservative Income Benchmark	2.42	3.27	8.32	7.69	4.56	3.61	5.14	4.40	
<b>Total Stock Market Portfolio</b>	6.98	4.06	18.66	8.90	13.95	10.06	14.54	8.62	Aug-05
Ttl Stock Mkt Benchmark	6.98	4.06	18.67	8.90	13.94	10.06	14.56	8.62	
<b>Total Bond Market Portfolio</b>	1.15	3.05	6.07	7.77	2.13	2.79	3.69	3.92	Sep-05
Ttl Bond Mkt Benchmark	1.29	3.13	6.20	7.87	2.22	2.84	3.74	3.93	
<b>Ttl International Stock Portfolio</b>	5.82	2.72	13.24	0.50	8.87	2.21	6.45	4.47	Sep-05
Ttl Int'l Stock Benchmark	5.83	2.97	13.54	0.71	9.41	2.57	6.81	4.28	
<b>Inflation-Protected Securities Portfolio</b>	0.82	2.77	6.04	4.61	1.83	1.60	3.43	3.46	Sep-05
Inflation-Protected Benchmark	0.85	2.84	6.10	4.74	1.98	1.64	3.48	3.55	
<b>REIT Portfolio</b>	1.70	1.73	19.29	12.14	3.97	7.60	15.32	7.31	Sep-05
REIT Benchmark	1.54	1.45	18.64	10.79	3.41	7.30	15.16	7.00	
<b>FDIC-Insured Portfolio</b>	0.20	0.60	1.07	1.87				1.08	Jan-17
FDIC-Insured Benchmark	0.17	0.51	0.96	1.73				1.03	
<b>ACTIVELY-MANAGED STATIC PORTFOLIOS</b>									
<b>Active Aggressive Portfolio</b>	4.63	2.50	12.24	5.01	8.74			8.95	Oct-15
Active Aggressive Benchmark	4.90	2.70	13.36	5.95	9.50			9.69	
<b>Active Moderate Portfolio</b>	3.47	2.37	9.74	5.39	6.79			7.09	Oct-15
Active Moderate Benchmark	3.61	2.65	10.40	6.38	7.22			7.46	
<b>Active Conservative Portfolio</b>	2.09	1.98	6.70	5.18	4.67			5.05	Oct-15
Active Conservative Benchmark	2.21	2.27	7.22	6.16	4.97			5.26	
<b>Socially Targeted Portfolio</b>	6.85	6.11	20.27	17.33	14.47	10.28		13.23	Nov-09
Socially Targeted Benchmark	7.05	4.28	18.50	10.32	14.09	10.59		13.59	
<b>Stable Value Portfolio</b>	0.20	0.60	1.18	2.34	1.99	1.80	2.23	3.42	Jan-00
Stable Value Benchmark	0.28	0.83	1.65	3.20	2.26	1.72	1.30	2.66	
<b>Global Equity Portfolio</b>	6.34	2.99	7.05					7.05	Feb-19
Global Equity Benchmark	6.42	3.22	7.01					7.01	

Note: Performance Returns are calculated by BNY Mellon Asset Servicing. They are presented net of management fees and Invest529 administrative fees.

# **Attachment E**

## **Investment Policies and Guidelines for the Prepaid529, Invest529, and ABLEnow Programs**

**Virginia College Savings Plan  
Statement of Investment Policy and  
Guidelines  
For  
Prepaid529<sup>SM</sup>**

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# **I. PURPOSE & RESPONSIBILITIES**



## **PURPOSE**

The purpose of this Statement of Investment Policy and Guidelines (“Statement”) is to identify a set of investment objectives, guidelines and performance standards for the Virginia529 Prepaid529 (“Prepaid529” or the “Program”). This Statement represents the formal investment policy document for Prepaid529 and is to be communicated to the investment managers for their use in developing appropriate investment portfolios. This document will also be used by the Board of the Virginia College Savings Plan (“Board”) as the basis for future investment management decisions, measurement and evaluation of investment performance of Prepaid529.

This Statement will be reviewed at least annually by the Board to ensure that it is consistent with the investment needs of the Program.

## **RESPONSIBILITIES**

### **Board**

Pursuant to § 23.1-704 of the Code of Virginia (the “Code”), the Board shall administer the Virginia College Savings Plan (“VA529” or the “Plan”) and shall develop and implement programs for (i) the prepayment of undergraduate tuition, as defined in § 23.1-700 of the Code, at a fixed, guaranteed level for application at a public institution of higher education and (ii) contributions to college savings trust accounts established on behalf of a qualified beneficiary in order to apply distributions from the account toward qualified higher education expenses at eligible educational institutions, as both such terms are defined in § 529 of the Internal Revenue Code of 1986, as amended, or other applicable federal law. In addition, pursuant to § 23.1-704 of the Code, the Board shall invest moneys in the Plan in any instruments, obligations, securities, or property deemed appropriate by the Board.

The Board is authorized to delegate certain responsibilities to qualified agents to assist them in properly meeting the overall Board responsibilities as outlined above. Specifically, the Board relies on the advice, guidance and actions of VA529 Management, the Investment Advisory Committee, a custodian, investment managers, an investment consultant, legal counsel and an actuary to perform various functions. The various roles and duties of each are further described below.

### **VA529 Management**

VA529 Management, comprised of the Chief Executive Officer (“CEO”) and such other senior officers as may be appointed by the CEO shall implement decisions approved by the Board and/or Investment Advisory Committee unless otherwise specifically provided by the Board or the Investment Advisory Committee. VA529 Management shall (i) oversee the development, structure, evaluation and implementation of Prepaid529’s strategic goals and objectives and (ii) with the assistance of the Investment Advisory Committee appointed by the Board, and by investment consultants, direct, manage and administer Prepaid529’s assets and programs, and (iii) report periodically and as requested to the Board.

## **Investment Advisory Committee**

According to § 23.1-702 of the Code, the Board of VA529 shall appoint an Investment Advisory Committee (“Committee”), the purpose of which is to assist the Board in fulfilling its fiduciary duty as trustee of VA529’s funds and to assist VA529 Management in directing, managing, and administering VA529’s assets, and to provide the Board with sophisticated, objective and prudent investment advice and direction on all matters related to the management of investments, within the parameters set by the Statement, as it may be amended from time to time. While this Statement refers to the responsibilities and duties of the Board, some of these responsibilities and duties may be delegated to the Committee via the Committee Charter<sup>1</sup>.

The Committee shall be comprised and administered in accordance with the Committee Charter, as it may be amended from time to time by the Board. The Committee shall review VA529’s investments and is authorized to make decisions with regard to investment managers. The Committee is further authorized to take any additional action specifically authorized in other Board actions. Recommendations are not binding upon the Board.

The Committee shall report any action taken to the Board at the Board’s next meeting.

## **Custodian**

The Plan shall contract on behalf of the Board with a third party custodian which shall have a level of experience and expertise in providing custodial services to plans and funds similar to those of Prepaid529. The custodian shall act as a fiduciary in the administration of the Prepaid529 accounts utilizing appropriate internal controls to insure the safety of the assets from such things as fraud, collusion, loss, diversion, etc. While the specific duties and responsibilities of the Plan’s custodian are contained in the contractual agreement between the custodian and Plan, the custodian, in general, has the following responsibilities:

- to handle all income, cash transactions, interest received, and other necessary activities;
- hold all securities on behalf of Prepaid529 and only deliver securities upon proper instruction from those authorized to provide such instruction or direction;
- perform, participate in and exercise such rights, privileges, duties and responsibilities possessed by any other owner or holder of bonds or other evidence of indebtedness and common and preferred stock, except for the voting of proxies, unless specifically authorized;
- safekeep all assets including securities, cash and cash equivalents;
- receive instructions from investment managers to purchase and sell various securities and ensure that transactions are settled according to established settlement procedures; and
- provide monthly transaction accounting on security holdings with reports provided to the appropriate VA529 Management in a timely manner.

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<sup>1</sup> The Committee Charter of the Virginia College Savings Plan Investment Advisory Committee was revised by the Board on August 24, 2017.

### **Actuary for Prepaid529**

As provided in § 23.1-706 and 23.1-710 of the Code, VA529 is to annually determine whether there are sufficient funds to maintain the actuarial soundness of the Program. To assist in this determination, the Board shall hire an actuary for the Program. While the specific duties and responsibilities of the Plan's actuary are contained in the contractual agreement between the actuary and Plan, the actuary, in general, has the following responsibilities:

- prepare, on a frequency determined by the Board, a comprehensive evaluation of Prepaid529's funded status and attest to the appropriateness of Prepaid529's assumptions and policies; and
- conduct special experience and actuarial studies as required by the Board.

### **Investment Consultant**

While the specific duties and responsibilities of the Plan's investment consultant are contained in the contractual agreement between the investment consultant and Plan, the consultant, in general, has the following responsibilities and will assist the Board and Committee with the following functions:

- provide evaluation of the investment results achieved by the designated investment managers in light of the investment guidelines and performance standards contained in this Statement;
- make recommendations to the Board of appropriate actions to be considered which, in the consultant's opinion, will enhance the probability of achieving overall investment program objectives. Such recommendations may include, but are not limited to:
  - use of alternate asset strategies or asset classes;
  - changes in overall investment policy;
  - changes in designated investment managers;
- provide assistance to the Board and/or Committee in screening and selecting investment managers, as appropriate; and
- at a minimum, meet with the Committee and Board every quarter.

### **Legal Counsel**

The VA529 General Counsel shall advise and represent the Board in all matters requiring legal insight and advice. VA529 Management, in consultation with the General Counsel, shall utilize the services of outside counsel and/or the Office of the Attorney General as such services may be required from time to time.

## **Investment Managers**

While the specific duties and responsibilities of the Plan's investment managers are contained in each contractual agreement between the designated investment manager and the Plan, investment managers, in general, have the following responsibilities:

- maintain registration as an investment advisor under the Investment Advisers Act of 1940, or be authorized and regulated by another appropriate authority;
- adhere to the policy guidelines contained in this Statement, unless granted an exception in writing;
- invest only in those asset classes, and adhere to the ranges for allocation among those classes, that the Board has stated to be appropriate for that manager's portfolio;
- exercise complete investment discretion within the boundaries of the restrictions outlined in this Statement or in any written exceptions to this Statement;
- strictly comply with all of the provisions of appropriate law as they pertain to the firm's dealings, functions and responsibilities as fiduciaries;
- prudently liquidate assets in the portfolio which cease to be in compliance with this Statement of Investment Policy or any written exceptions to this Statement. If in the manager's judgment, it is in the Program(s) best interest to not liquidate such an asset promptly, the manager will advise VA529 Management of the circumstances and make a recommendation regarding the liquidation of that asset;
- diversify the portfolio unless, under the circumstances, it is clearly prudent to not so diversify;
- ensure that brokers will be selected only on a competitive, best execution basis;
- invest the assets of the Program with care, skill, prudence and diligence under 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 such aims;
- provide VA529 Management with a monthly accounting of assets;
- issue a quarterly report to the Committee and/or their designees which includes the following information:
  - the market value of account assets as of the last business day of each quarter;
  - the portion of account assets allocated to each investment asset class as of the last business day of each quarter;

- time-weighted rates of return measured net of investment management fees and all expenses or gross of fees (as appropriate) for the current quarter, year-to-date and historical time periods;
- average account characteristics and number of holdings as of the last business day of each quarter; and
- expenses:
- acknowledge in writing the recognition and acceptance of full responsibility as a fiduciary, and the firm's intention to comply with this Statement as it currently exists or as is modified by joint agreement in the future.

### **Exceptions Allowed**

On a case by case basis, the Board may grant the investment manager an exception to the foregoing requirements where such exceptions are deemed appropriate and prudent. Exceptions applicable to each individual investment manager may be included in the manager's investment management agreement with the Plan or in a letter to the manager signed by the CEO of the Plan.

## **II. ASSET ALLOCATION & REBALANCING**

## **INVESTMENT OBJECTIVES**

The Virginia529 Prepaid529 offers contracts to eligible individuals, the benefits from which cover future in-state undergraduate tuition and mandatory fees assessed to all students for the normal full-time course load at Virginia public colleges and universities. Prepaid529 benefits may also be applied toward the cost of tuition and fees at Virginia private colleges as well as at eligible educational institutions nationwide, and in certain cases, at schools around the world. Given this mission, the primary investment objectives are outlined below.

- Prepaid529's investment portfolio shall be allocated and managed with the objective of attaining an investment return which equals or exceeds the actuarial return assumptions, throughout the majority of economic cycles, taking into consideration cash flow demands and investment risks.
- Prepaid529's investment portfolio shall be invested and managed to provide sufficient liquidity to meet all reasonably anticipated operational requirements.
- Prepaid529's investment portfolio shall be invested prudently in order to endeavor to meet or exceed the assumed targeted rate of return as determined by the Board.

## **ASSET ALLOCATION & REBALANCING**

The target asset allocation should reflect a proper balance between Prepaid529's needs for liquidity and return on assets, combined with an appropriate level of risk. The target asset mix, along with the acceptable minimum and maximum ranges, is outlined in Appendix A.

The target asset allocation should not be regarded as a rigid set of rules regarding asset allocation. The Board will review the allocation periodically and make adjustments as may be appropriate in light of changing market conditions.

Liquidity is required only to meet defined payout needs, unless the investment managers are otherwise advised by VA529 Management.

The Board is charged with the responsibility of monitoring the overall allocation within the parameters described above. It is understood that the maximum and minimum ranges are guidelines and that deviations may occur from time to time as a result of market impact or from short-term decisions implemented by either the Board or, with prior approval, by the investment managers. Rebalancing will occur as needed according to the VA529 Rebalancing Policy. VA529 staff certifies and reports to VA529 management on a monthly basis whether portfolio components are properly balanced according to asset allocation parameters.

## **III. ALLOWABLE INVESTMENTS**



## **ALLOWABLE INVESTMENTS**

Pursuant to § 23.1-706 of the Code, as amended, the Board is authorized to acquire and retain every kind of property and any kind of investment, and to retain property properly acquired, without time limitation and without regard to its suitability for original purpose, specifically including but not limited to:

- Debentures and other corporate obligations of foreign or domestic corporations;
- Common or preferred stocks traded on foreign or domestic stock exchanges;
- Not less than all of the stock or 100 percent ownership of a corporation or other entity organized by the Board under the laws of the Commonwealth for the purpose of acquiring and retaining real property that the Board is authorized to acquire and retain;
- Unregistered securities, often referred to as letter stock or private placements, including limited partnerships and 144A securities;
- Securities of any open-end or closed-end management type investment company or investment trust registered under the federal Investment Company Act of 1940, as amended, including such investment companies or investment trusts which, in turn, invest in the securities of such investment companies or investment trusts. Also permitted are pooled investments, including collective trusts and similar commingled fund vehicles, which may be used as an alternative to a mutual fund investment; and
- Bonds, notes or other obligations of the Commonwealth or its agencies and instrumentalities.

### **General Portfolio Diversification**

All individually managed portfolios and funds must maintain sufficient diversification among security issuers and market sectors such that the performance of one security or sector will not have an excessive impact on the entire portfolio. Investment mandates will be considered individually as well as collectively to ensure that investment styles, philosophies and investment approaches are complementary.

### **General Restrictions/Guidelines**

The Board requires that all investment managers comply with the following limitations and restrictions on their investment activities and holdings:

- Unless granted permission by the Board in writing, investment managers shall not engage in short sales or margin purchases and all accounts shall be free of leverage.
- Unless granted permission by the Board in writing, commodities or commodity contracts are not allowed.

- Derivative securities are prohibited except where specifically permitted in the investment manager agreement, subscription agreement, or prospectus. Specific asset classes may be permitted to make use of derivatives consistent with the overall investment guidelines and objectives of that asset class.
- Investments in commercial paper or other similar securities intended as cash equivalents shall be made only if such paper is rated at least A1/P1 and has a maturity of less than one year or a commingled money market fund offered by the custodian bank is used which meets these standards.
- The individual managers are expected to be fully invested at all times, with cash accounting for no more than 10% of the portfolio's market value.

### **Individual Portfolio Guidelines - Equity**

- Securities of any one issuer are limited to 5% (at market) of the individual portfolio.
- Portfolios should be diversified by sector, with sector allocations limited to a maximum of 200% of the weight of the sector in the benchmark (see Appendix for the benchmark assigned to each asset class), or 25%, whichever is greater, with the exception of sectors whose benchmark allocation is less than 5%, where the maximum allocation shall be 15%.
- U.S. equity portfolios cannot hold non-dollar denominated securities.
- No quantitative guidelines are given as to industry diversification. However, the investment manager is expected to develop and apply prudent standards.

### **Individual Portfolio Guidelines – Fixed Income**

- While no specific ranges are required, it is expected that the average duration of the portfolio will be within +/- 20% of its designated benchmark (see Appendix for the benchmark assigned to each asset class).
- For the core fixed income portfolios, which are primarily invested in U.S. investment grade debt securities, the average quality of the total account should be A-rated or higher. Only investment grade securities, as defined as BBB-rated or higher by Standard & Poor's, or the equivalent rating by Moody's or Fitch may be purchased, unless the Board grants specific exceptions in writing. For bonds with split ratings, the higher rating will apply. In cases where securities were purchased and were subsequently downgraded, the manager will immediately notify VA529 Management and outline the course of action anticipated for the security.
- For the non-core fixed income portfolios, which can hold non-investment grade debt securities, the portfolio is expected to maintain an overall average quality rating of BBB or higher.
- Securities of any one issuer, with the exception of the U.S. Government and its agencies and instrumentalities, are limited to 5% (at market) of the individual portfolio.
- U.S. fixed income portfolios cannot hold non-dollar denominated securities.

### **Individual Portfolio Guidelines – Fixed Income, Stable Value**

- While no specific ranges are required, it is expected that the average duration of the account will be between two and four years.
- The average quality of the total account should be AA- or higher. Only investment grade securities defined as BBB-rated or higher by Standard & Poor's or the equivalent rating by Moody's or Fitch, may be purchased, unless the Board grants specific exceptions in writing. For bonds with split ratings, the higher rating will apply. In cases where securities were purchased and were subsequently downgraded, the manager will immediately notify VA529 Management and outline the course of action anticipated for the security.
- Securities of any one issuer, with the exception of the U.S. Government and its agencies and instrumentalities, are limited to 5% (at market) of the individual portfolio.
- Stable Value portfolios cannot hold non-dollar denominated securities.

### **Exceptions Allowed**

On a case by case basis, the Board may grant the investment manager a special exception to the foregoing restrictions where such exceptions are deemed appropriate and prudent. Specific guidelines applicable to each individual investment manager will be recorded in the manager's investment management agreement with the Plan or in a letter to the manager signed by the CEO of the Plan.

### **Commingled Funds, Collective Trusts and Mutual Funds**

The guidelines in this Statement have been established to ensure that the investments of each investment manager are in keeping with the return and risk objectives of Prepaid529. However, in attempting to meet these objectives, it may be advantageous for a portion of portfolio assets to be placed in a pooled, commingled, collective trust, or mutual fund which may have specific restrictions, policies, or guidelines that conflict from time-to-time with those outlined in this Statement. To the extent that the Board has reviewed the investment guidelines of such funds, and determined their appropriateness to the investment objectives of the Program, the restrictions, policies and guidelines in the funds' prospectus or offering statement shall take precedence over those stated in this Statement.

# **IV. INVESTMENT MANAGER SELECTION, MONITORING AND TERMINATION**

## BACKGROUND

The Board reserves the right to add, delete or replace investment managers in order to meet performance guidelines outlined in this policy or other factors affecting the continuing viability of the portfolio.

## SELECTION – GENERAL CRITERIA

When selecting investment managers for Prepaid529, the following six broad categories should be considered:

- Economies of Scale
- Diversification
- Transparency
- Organizational Strength
- Performance Consistency
- Risk/ Reward

The following *basic* selection criteria are to be used when selecting a new investment manager to be added to Prepaid529 or when selecting a replacement manager for an existing asset class. These criteria have been classified according to the categories listed above.

### Economies of Scale

- Have at least \$500 million in assets under management.
- Have a reasonable expense ratio or fees compared to other vehicles within an appropriate peer group.

### Diversification

- No more than 10% of the portfolio may be invested in any one company valued at market. Likewise, appropriate risk controls should be outlined in each investment manager agreement with respect to sector and industry weightings relative to an appropriate benchmark.

### Transparency

- Employ an investment process that is well defined.
- Invest in securities consistent with the investment manager's strategy<sup>2</sup>.
- Agree to meet all other requirements set forth in this Statement. However, all mutual funds, collective trusts, and similar commingled fund vehicles included in Prepaid529 will also be subject to the investment guidelines as set forth in their prospectuses, or applicable offering documents.

### Organizational Strength

- Be managed and supported by qualified personnel and appropriate resources.

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<sup>2</sup> For instance, large cap growth vehicles should primarily focus on large cap stocks with growth-oriented characteristics.

### Performance Consistency

- Have a minimum of 3 years of verifiable investment performance information<sup>3</sup>.
- Have competitive returns versus an appropriate benchmark and peer group.

### Risk/ Reward

- Have acceptable volatility relative to an appropriate benchmark. Greater volatility than the benchmark should be commensurate with a higher return.

## **GUIDELINES FOR PROSPECTIVE PRIVATE EQUITY MANAGER REVIEW**

In developing recommendations for a private equity fund of funds or direct manager (GP) for the Prepaid529 portfolio, the Committee recognizes that the investment consultant may not have rated, or may not have a current rating for the prospective GP and/or fund that the Committee may want to consider.

The following list represents criteria by which a GP or fund would be eligible for further consideration by the Committee, and thus eligible for the commencement of diligence work and/or rating by the investment consultant (or other private equity consultant) prior to any allocation or commitment to such manager by the Committee. The GP should exhibit/meet most if not all of the following characteristics/criteria before a request is made of the investment consultant to proceed with a formal manager or fund rating. Any decision to proceed would be subject to availability of funds and a negotiated fee would be agreed to with the investment consultant.

If the manager/GP satisfies most if not all of the criteria, VA529 staff and/or the Committee may request whether the investment consultant has:

- 1) Published a “Research View” document;
- 2) Published a rating or a “Research Note” report; or
- 3) Has published neither but has developed either a positive or less than positive opinion on the firm that would provide an indication of whether we should consider proceeding with a Research Note or View report?

This will allow VA529 and the Committee to determine whether we should proceed with a Research View and/or a Research Note and formal rating.

Criteria:

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<sup>3</sup> Vehicles with less than 3 years of history may be tactical or opportunities investments where strategies often close quickly due to liquidity constraints.

- The GP has raised at least one or more prior fund of funds over a period that is reasonable given fund size, type, underlying fund size and allocation, etc.;
- The GP will have proven the ability to access high-quality underlying managers, and in amounts that are meaningful to the portfolios;
- The GP will have developed an organizational capability sufficiently robust to effectively invest and administer the private market program; and sufficient levels of assets, staffing and external resources will be in place to ensure successful implementation of the program;
- Total fund sizes and growth in such fund sizes has been reasonable with respect to the GP's history, underlying investment type or strategy, and the number and size of the underlying funds to which the managers allocates and commits;
- The GP's fund of funds has an advisory committee (LPAC) and Virginia529 will be assigned a seat on the LPAC;
- The Limited Partnership Agreement (LPA) has been reviewed by VA529 staff and counsel;
- The GP has agreed to provide transparency into the underlying funds;
- The GP's previous funds of funds (of similar strategy), as applicable, have on average been in the top two quartiles vs. a comparative peer group, and long-term performance exceeds that of comparable listed benchmarks;
- The GP's primary investment decision makers have on average meaningful experience as Limited Partners (LPs) with proven institutions and /or in the private equity industry in the space in which they expect to focus;
- If the fund of funds vehicle contains a fee waterfall, it is structured as a European waterfall; and
- The GP has successfully attracted other institutional LPs in current or past funds, with an aggregate amount of institutional commitments to current and previous fund of funds that is reasonable given the fund size, fund strategy, number of funds, etc.

## **INVESTMENT MANAGER SEARCHES – COMMITMENT TO DIVERSITY**

The Board is committed to seeking diversity in the ownership, management, and staffing of firms with which the Plan does business, including investment managers. Accordingly, whenever a manager search is directed by the Plan, the Plan’s investment consultant will include in its research report information on the ownership structure of each firm and publicly available data on ownership by women and minorities. In addition, if managers are interviewed by the Committee, the Plan’s investment consultant will request that each candidate include in their respective presentation a discussion of the candidate’s overall commitment to diversity and a review of the distribution in each level of the organization by gender and ethnicity in order to obtain information on the firm’s diversity. Other information may be provided at the candidate’s discretion to demonstrate their firm’s commitment. Such information shall be considered in evaluating potential investment managers, with the primary criteria remaining those outlined under General Criteria above, in accordance with the fiduciary obligations of the Board.

## PERFORMANCE MONITORING

The Board shall periodically, but not less than quarterly, evaluate investment managers. Each actively managed investment option will be measured against its benchmark and peer group for the measurement periods outlined below. The ability to meet the benchmark comparison on a net of fees basis will be a primary measure of performance. In addition to monitoring performance, consideration will be given to risk adjusted metrics.

<i>Measurement Period</i>	<i>Benchmark Comparison</i>	<i>Peer Group Comparison</i>
Multiple rolling 3-year periods	<ul style="list-style-type: none"> <li>The total rate of return should exceed the return of the benchmark over most rolling periods.<sup>4</sup></li> </ul>	<ul style="list-style-type: none"> <li>The total rate of return should exceed the median return of the fund’s peer group over most rolling periods<sup>4</sup>.</li> </ul>

For the managers that do not have a 3-year track record with Prepaid529, the manager’s separate account composite or mutual fund performance will be used for evaluation. The manager may also be placed on watch within a lesser period if the strategy deviates from the universe and benchmark dramatically and in a manner that would not have been expected given the tracking error expectations of the strategy.

If the investment manager utilizes a passively managed strategy, the portfolio will be monitored on its ability to successfully track the risk and return characteristics of the stated benchmark. Peer group comparisons will not be required for passive strategies.

<sup>4</sup> Measured over the latest 12 quarters available for review.



In addition to monitoring investment performance results, the Board may periodically evaluate the investment managers on the basis of the following factors to ascertain whether they should continue to be utilized in Program:

- the stability and depth of the investment professionals responsible for the management of this strategy;
- the suitability of its investment approach for Prepaid529;
- its management fees; and
- any other measures the Board deems useful and relevant.

### **Watch List Status & Termination**

If an investment manager fails to meet the minimum standards of investment performance outlined in this document, the Board may place the manager on a watch list for one year. The following are some examples of reasons for termination or placing an investment manager on the watch list:

- significant change in portfolio management, ownership or control;
- significant change in portfolio management style;
- substantive change in portfolio turnover; and
- continued performance shortfalls versus the peer group or benchmark.

Reasons for termination without a probationary period may include, but are not limited to:

- any violation of SEC, or other applicable authority, rules or regulations, as well as any other important and appropriate statutory regulatory requirements;
- operational difficulties concerning fund transfers or pricing;
- substantial and consistent deviation from the characteristics of its investment category; and
- failure to adhere to guidelines in this Statement or in the investment management agreement.

By the end of the watch list period, the Board will evaluate the investment manager and determine whether:

- the investment manager remains on the watch list for an additional specified period of time;
- the investment manager is removed from the watch list; or
- the investment manager is terminated.

## **VIII. SUPPLEMENTAL ITEMS**

## CASH/LIQUIDITY POLICY

The following procedures are hereby adopted and will remain in effect until such time as monthly cash flows of Prepaid529 and/or contributions to Prepaid529 support the ongoing benefit and expense payments required by the Program.

- The Cash/Liquidity Policy for Prepaid529 shall be integrated with the management of Prepaid529's asset allocation rebalancing policy.
- Cash required for benefit payments and operating expenses shall be distributed from a cash account. The balance in that account will be monitored on a frequent basis and replenished as necessary, but no less often than quarterly.
- When it is determined that there is insufficient cash in the designated cash account to fund upcoming cash withdrawals, transfers will be made from one or more of the investment accounts into the cash account. The determination of which accounts will provide funds to the cash account will be made by VA529 Management in consultation with the investment consultant, with the following objectives:
  - rebalancing toward the target asset allocation; and
  - minimizing the transaction costs of providing cash.

## PROXY VOTING

Proxies will be voted for the exclusive benefit of the Plan.

### **Proposals Related to Funds and other Securities**

The Board may delegate the voting of proxies to others (e.g., the Investment Advisory Committee, appropriate VA529 Management, the investment managers or a qualified third party). In addition, the Board may require periodic reporting of the proxy voting activity by any person to whom such power has been delegated.

If a qualified third party is retained to manage the proxy voting activities for Prepaid529, a review of the guidelines used to vote proxies will be conducted annually by VA529 Management. In addition, the third party will provide reports every calendar quarter to appropriate VA529 Management as to the proxies voted.

## **SECURITIES LENDING**

Securities lending is not allowed in the separate accounts in Prepaid529, unless specifically approved by the Board. However, some of the investment vehicles, such as mutual funds, collective trusts, and similar commingled fund vehicles may engage in securities lending if so allowed by their prospectus or applicable offering document.

## **ACCEPTANCE AND ADOPTION**

The Board of Virginia College Savings Plan has approved and adopted this amended and restated Statement of Investment Policy and Guidelines as of March 27, 2019.

# **APPENDICES**

## APPENDIX A - TARGET ASSET ALLOCATION

The target asset mix, consistent with the achievement of the long-term objective of the Plan, is as follows:

	<u>Target</u>	<u>Allowable Range</u>
<b>Equities</b> Comprised of publicly traded U.S. and International Equity	<b>32.5%</b>	<b>25.0 - 40.0%</b>
<b>Alternatives</b> Comprised of asset classes or strategies such as Public or Private Real Estate, Private Partnerships or Hedge Funds	<b>15.0%</b>	<b>10.0 - 20.0%</b>
<b>Fixed Income Core/Non-Core</b> Comprised of asset classes such as Convertibles, High Yield, Emerging Market Debt, Private Debt, Bank Loans, and U.S. Investment Grade Debt	<b>52.5%</b>	<b>47.5 – 57.5%</b>

Note: This allocation is reviewed annually by the Investment Advisory Committee and the Board in establishing the long-term investment return assumption for Prepaid529's annual actuarial valuation report.

## APPENDIX B – ASSET CLASSES, BENCHMARKS & PEER GROUPS

The table below outlines the applicable benchmarks and peer groups for each asset class and style represented in the Prepaid529 portfolio.

<b>Asset Class</b>	<b>Asset Group</b>	<b>Benchmark</b>	<b>Peer Group</b>
U.S. Large Cap Passive Equity	Public Equity	S&P 500	NA
U.S. Small/Mid Cap Growth Equity	Public Equity	Russell 2500 Growth	Small/Mid Cap Equity
U.S. Small Cap Value Equity	Public Equity	Russell 2000 Value	Small Cap Value Equity
U.S. Small/Mid Cap Value Equity	Public Equity	Russell 2500 Value	Small/Mid Cap Value Equity
Developed Markets Equity	Public Equity	MSCI ACWI ex US	Developed Markets Equity Mutual Fund
Emerging Markets Equity	Public Equity	MSCI Emerging Markets	Emerging Markets Mutual Fund
Private Real Estate	Alternatives	NCREIF (various)	Private Real Estate
Diversified Hedge Fund of Funds	Alternatives	HFRI Fund of Funds Conservative Index	Diversified Hedge Funds
Private Equity Partnerships	Alternatives	ACWI IMI + 300 bps	NA
U.S. High Yield Fixed income	Non-Core Fixed Income	Bloomberg Barclays U.S. High Yield Ba/B 1% Issuer Cap Index	U.S. High Yield Fixed Income
Convertibles	Non-Core Fixed Income	TR Global Defensive Investment Grade	Convertibles
Emerging Markets Debt	Non-Core Fixed Income	JP Morgan EMBI (various)	Emerging Market Debt
Bank/Leveraged Loans	Non-Core Fixed Income	Credit Suisse Leveraged Loan Index	Fixed / Bank /Leveraged Loans
Mortgage Backed Securities	Core Fixed Income	Bloomberg Barclays US Securitized Bond Index	U.S. Fixed / Mortgage-Backed
Intermediate Term Fixed Income	Core Fixed Income	Bloomberg Barclays US Credit Intermediate Index	U.S. Fixed / Intermediate
U.S. Treasury Inflation Adjusted Fixed Income	Core Fixed Income	Bloomberg Barclays Capital U.S. TIPS	NA
Private Debt Partnerships	Non-Core Fixed Income	S&P Leveraged Loan Index	NA
Stable Value	Core Fixed Income	3-Month T-Bills + 100 bps	Stable Value
Money Market Fund	Core Fixed Income	Citigroup 3-Month T-Bill	NA

## APPENDIX C – TOTAL FUND BENCHMARK

	<u>Benchmark</u>	<u>Weight</u>
<b>Equity</b>		
Domestic Equity	Russell 3000 Index	15.0%
Developed Markets Equity (EAFE)	MSCI EAFE Index	10.0%
Emerging Markets Equity	MSCI Emerging Markets	<u>7.5%</u>
		32.5%
<b>Alternatives</b>		
Core Real Estate	NCREIF ODCE (1Q in Arrears)	5.0%
Hedge Funds	HFRI Fund of Funds Conservative Index	5.0%
Private Equity	Custom Benchmark*	<u>5.0%</u>
		15.0%
<b>Fixed Income</b>		
Convertibles	BofA ML Global 300 Convertibles	7.5%
High Yield	Barclays Capital Corp High Yield	10.0%
Emerging Markets Debt (Hard)	JPMorgan EMBI Global Diversified	5.0%
Emerging Markets Debt (Local)	JPMorgan GBI-EM Global Diversified	5.0%
Core Bonds	Bloomberg Barclays U.S. Aggregate Bond Index	15.0%
TIPS	Bloomberg Barclays TIPS Index	5.0%
Intermediate Credit	Bloomberg Barclays Intermediate Credit	<u>5.0%</u>
		52.5%

\* Custom benchmark is defined as actual partnership returns for the first 4 –years and thereafter MSCI ACWI +300



**Virginia College Savings Plan  
Statement of Investment Policy and  
Guidelines  
For  
Invest529<sup>SM</sup>**

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# **I. PURPOSE & RESPONSIBILITIES**

## **PURPOSE**

The purpose of this Statement of Investment Policy and Guidelines (“Statement”) is to identify a set of investment objectives, guidelines and performance standards for Virginia529 Invest529 (“Invest529”). This Statement represents the formal investment policy document for Invest529 and is to be communicated to the investment managers for their use in developing an appropriate investment portfolio. This document will also be used by the Board as the basis for future investment management decisions, measurement, and evaluation of investment performance of Invest529.

This Statement will be reviewed at least annually by the Board to ensure that it is consistent with the investment needs of Invest529.

## **RESPONSIBILITIES**

### **Board**

Pursuant to § 23.1-704 of the Code of Virginia (“Code”), the Board shall administer the Virginia College Savings Plan (“VA529” or the “Plan”) and shall develop and implement programs for (i) the prepayment of undergraduate tuition, as defined in § 23.1-700 of the Code, at a fixed, guaranteed level for application at a public institution of higher education and (ii) contributions to college savings trust accounts established on behalf of a qualified beneficiary in order to apply distributions from the account toward qualified higher education expenses at eligible educational institutions, as both such terms are defined in § 529 of the Internal Revenue Code of 1986, as amended, or other applicable federal law. In addition, pursuant to § 23.1-704 of the Code, the Board shall invest moneys in the Plan in any instruments, obligations, securities, or property deemed appropriate by the Board.

The Board is authorized to delegate certain responsibilities to qualified agents to assist them in properly meeting the overall Board responsibilities as outlined above. Specifically, the Board relies on the advice, guidance and actions of VA529 Management, the Investment Advisory Committee, a custodian, investment managers, an investment consultant and legal counsel to perform various functions. The various roles and duties of each are further described below.

### **VA529 Management**

VA529 Management, comprised of the Chief Executive Officer (“CEO”) and such other senior officers as may be appointed by the CEO, shall implement decisions approved by the Board and/or Investment Advisory Committee unless otherwise specifically provided by the Board or the Investment Advisory Committee. VA529 Management shall (i) oversee the development, structure, evaluation and implementation of Invest529’s strategic goals and objectives and (ii) with the assistance of the Investment Advisory Committee appointed by the Board, and by investment

consultants, direct, manage and administer Invest529's assets and programs, and (iii) report periodically and as requested to the Board.

### **Investment Advisory Committee**

According to § 23.1-702 of the Code, the Board of VA529 shall appoint an Investment Advisory Committee ("Committee"), the purpose of which is to assist the Board in fulfilling its fiduciary duty as trustee of VA529's funds and to assist VA529 Management in directing, managing, and administering VA529's assets, and to provide the Board with sophisticated, objective and prudent investment advice and direction on all matters related to the management of investments, within the parameters set by the Statement, as it may be amended from time to time. While this Statement refers to the responsibilities and duties of the Board, some of these responsibilities and duties may be delegated to the Committee via the Committee Charter<sup>1</sup>.

The Committee shall be comprised and administered in accordance with the Committee Charter, as it may be amended from time to time by the Board. The Committee shall review VA529's investments and is authorized to make decisions with regard to investment managers. The Committee is further authorized to take any additional action specifically authorized in other Board actions. Recommendations are not binding upon the Board.

The Committee shall report any action taken to the Board at the Board's next meeting.

### **Custodian**

The Plan shall contract on behalf of the Board with a third party custodian which shall have a level of experience and expertise in providing custodial services to plans and funds similar to those of Invest529. The custodian shall act as a fiduciary in the administration of the Invest529 accounts utilizing appropriate internal controls to insure the safety of the assets from such things as fraud, collusion, loss, diversion, etc. While the specific duties and responsibilities of the Plan's custodian are contained in the contractual agreement between the custodian and the Plan, the custodian, in general, has the following responsibilities:

- to handle all income, cash transactions, interest received, and other necessary activities;
- hold all securities on behalf of Invest529 and only deliver securities upon proper instruction from those authorized to provide such instruction or direction;
- perform, participate in and exercise such rights, privileges, duties and responsibilities possessed by any other owner or holder of bonds or other evidence of indebtedness and common and preferred stock, except for the voting of proxies, unless specifically authorized;

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<sup>1</sup> The Committee Charter of the Virginia College Savings Plan Investment Advisory Committee was revised by the Board on December 8, 2016.

- safekeep all assets including securities, cash and cash equivalents;
- receive instructions from investment managers to purchase and sell various securities and ensure that transactions are settled according to established settlement procedures; and
- provide monthly transaction accounting on security holdings with reports provided to the appropriate VA529 Management in a timely manner.

### **Investment Consultant**

While the specific duties and responsibilities of the Plan's investment consultant are contained in the contractual agreement between the investment consultant and the Plan, the consultant, in general, has the following responsibilities and will assist the Board and Committee with the following functions:

- provide evaluation of the investment results achieved by the designated investment managers in light of the investment guidelines and performance standards contained in this Statement;
- make recommendations to the Board of appropriate actions to be considered which, in the consultant's opinion, will enhance the probability of achieving overall investment program objectives. Such recommendations may include, but are not limited to:
  - use of alternate asset strategies or asset classes;
  - changes in overall investment policy;
  - changes in designated investment managers;
- provide assistance to the Board and/or Committee in screening and selecting investment managers, as appropriate; and
- at a minimum, meet with the Committee and Board every quarter.

### **Legal Counsel**

The VA529 General Counsel shall advise and represent the Board in all matters requiring legal insight and advice. VA529 Management, in consultation with the General Counsel, shall utilize the services of outside counsel and/or the Office of the Attorney General as such services may be required from time to time.

## **Investment Managers**

While the specific duties and responsibilities of the Plan's investment managers are contained in each contractual agreement between the designated investment manager and the Plan, investment managers, in general, have the following responsibilities:

- maintain registration as an investment advisor under the Investment Advisers Act of 1940, or be authorized and regulated by another appropriate authority;
- adhere to the policy guidelines contained in this Statement, unless granted an exception in writing;
- invest only in those asset classes, and adhere to the ranges for allocation among those classes, that the Board has stated to be appropriate for that manager's portfolio;
- exercise complete investment discretion within the boundaries of the restrictions outlined in this Statement or in any written exceptions to this Statement;
- strictly comply with all of the provisions of appropriate law as they pertain to the firm's dealings, functions and responsibilities as fiduciaries;
- prudently liquidate assets in the portfolio which cease to be in compliance with this Statement or any written exceptions to this Statement. If in the manager's judgment, it is in Invest529's best interest to not liquidate such an asset promptly, the manager will advise VA529 management of the circumstances and make a recommendation regarding the liquidation of that asset;
- diversify the portfolio unless, under the circumstances, it is clearly prudent to not so diversify;
- ensure that brokers will be selected only on a competitive, best execution basis;
- invest the assets with care, skill, prudence and diligence under 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 such aims;
- provide VA529 Management with a monthly accounting of assets;
- issue a quarterly report to the Board and/or their designees which includes the following information:
  - the market value of account assets as of the last business day of each quarter;
  - the portion of account assets allocated to each investment asset class as of the last business day of each quarter;

- time-weighted rates of return measured net of investment management fees and all expenses or gross of fees (as appropriate) for the current quarter, year-to-date and historical time periods;
  - average account characteristics and number of holdings as of the last business day of each quarter; and
  - expenses;
- acknowledge in writing the recognition and acceptance of full responsibility as a fiduciary, and the firm's intention to comply with this Statement as it currently exists or as is modified by joint agreement in the future.

### **Exceptions Allowed**

On a case by case basis, the Board may grant the investment manager an exception to the foregoing requirements where such exceptions are deemed appropriate and prudent. Exceptions applicable to each individual investment manager may be included in the manager's investment management agreement with the Plan or in a letter to the manager signed by the CEO of the Plan.



## **II. ALLOWABLE INVESTMENTS**

## **ALLOWABLE INVESTMENTS**

Pursuant to § 23.1-706 of the Code, as amended, the Board is authorized to acquire and retain every kind of property and any kind of investment, and to retain property properly acquired, without time limitation and without regard to its suitability for original purpose, specifically including but not limited to:

- Debentures and other corporate obligations of foreign or domestic corporations;
- Common or preferred stocks traded on foreign or domestic stock exchanges;
- Not less than all of the stock or 100 percent ownership of a corporation or other entity organized by the Board under the laws of the Commonwealth for the purpose of acquiring and retaining real property that the Board is authorized to acquire and retain;
- Unregistered securities, often referred to as letter stock or private placements, including limited partnerships and 144A securities;
- Securities of any open-end or closed-end management type investment company or investment trust registered under the federal Investment Company Act of 1940, as amended, including such investment companies or investment trusts which, in turn, invest in the securities of such investment companies or investment trusts. Also permitted are pooled investments, including collective trusts and similar commingled fund vehicles, which may be used as an alternative to a mutual fund investment;
- Bonds, notes or other obligations of the Commonwealth or its agencies and instrumentalities.

### **General Portfolio Diversification**

All individually managed portfolios and funds must maintain sufficient diversification among security issuers and market sectors such that the performance of one security or sector will not have an excessive impact on the entire portfolio. Investment mandates will be considered individually as well as collectively to ensure that investment styles, philosophies and investment approaches are complementary.

### **General Restrictions/Guidelines**

The Board requires that all investment managers comply with the following limitations and restrictions on their investment activities and holdings:

- Unless granted permission by the Board in writing, investment managers shall not engage in short sales or margin purchases and all accounts shall be free of leverage.

- Unless granted permission by the Board in writing, commodities or commodity contracts are not allowed.
- Derivative securities are prohibited except where specifically permitted in the investment manager agreement, subscription agreement or prospectus. Specific asset classes may be permitted to make use of derivatives consistent with the overall investment guidelines and objectives of that asset class.
- Investments in commercial paper or other similar securities intended as cash equivalents shall be made only if such paper is rated at least A1/P1 and has a maturity of less than one year or a commingled money market fund offered by the custodian bank is used which meets these standards.
- The individual managers are expected to be fully invested at all times, with cash accounting for no more than 10% of the portfolio's market value.

### **Individual Portfolio Guidelines - Equity**

- Securities of any one issuer are limited to 5% (at market) of the individual portfolio.
- Portfolios should be diversified by sector, with sector allocations limited to a maximum of 200% of the weight of the sector in the benchmark (see the Appendix for the benchmark assigned to each asset class), or 25%, whichever is greater, with the exception of sectors whose benchmark allocation is less than 5%, where the maximum allocation shall be 15%.
- U.S. equity portfolios cannot hold non-dollar denominated securities.
- No quantitative guidelines are given as to industry diversification. However, the investment manager is expected to develop and apply prudent standards.

### **Individual Portfolio Guidelines – Fixed Income**

- While no specific ranges are required, it is expected that the average duration of the account will be within +/- 20% of the designated benchmark (see Appendix B for the benchmark assigned to each asset class).
- For the Core Fixed Income portfolios, the average quality of the total account should be A- or higher. Only investment grade securities defined as BBB-rated or higher by Standard & Poor's or the equivalent rating by Moody's or Fitch, may be purchased, unless the Board grants specific exceptions in writing. For bonds with split ratings, the higher rating will apply. In cases where securities were purchased and were subsequently downgraded, the manager will immediately notify VA529 Management and outline the course of action anticipated for the security.
- Core Plus Fixed Income portfolios can hold non-investment grade securities and have an overall average quality rating of BBB or higher.
- Securities of any one issuer, with the exception of the U.S. Government and its agencies and instrumentalities, are limited to 5% (at market) of the individual portfolio.
- U.S. fixed income portfolios cannot hold non-dollar denominated securities.

### **Individual Portfolio Guidelines – Fixed Income, Stable Value**

- While no specific ranges are required, it is expected that the average duration of the account will be between two and four years.
- The average quality of the total account should be AA- or higher. Only investment grade securities defined as BBB-rated or higher by Standard & Poor's or the equivalent rating by Moody's or Fitch, may be purchased, unless the Board grants specific exceptions in writing. For bonds with split ratings, the higher rating will apply. In cases where securities were purchased and were subsequently downgraded, the manager will immediately notify VA529 Management and outline the course of action anticipated for the security.
- Securities of any one issuer, with the exception of the U.S. Government and its agencies and instrumentalities, are limited to 5% (at market) of the individual portfolio.
- Stable Value portfolios cannot hold non-dollar denominated securities.

### **Exceptions Allowed**

On a case by case basis, the Board may grant the investment manager a special exception to the foregoing restrictions where such exceptions are deemed appropriate and prudent. Specific guidelines applicable to each individual investment manager may be recorded in the manager's investment management agreement with the Plan or in a letter to the manager signed by the CEO of the Plan.

### **Commingled Funds, Collective Trusts and Mutual Funds**

The guidelines in this Statement have been established to ensure that the investments of each investment manager are in keeping with the return and risk objectives of Invest529. However, in attempting to meet these objectives, it may be advantageous for a portion of portfolio assets to be placed in a pooled, commingled, collective trust, or mutual fund which may have specific restrictions, policies, or guidelines that conflict from time-to-time with those outlined in this Statement. To the extent that the Board has reviewed the investment guidelines of such funds, and determined their appropriateness to Invest529's investment objectives, the restrictions, policies and guidelines in the funds' prospectus or offering statement shall take precedence over those stated in this Statement.

### **III. Invest529 PROGRAM STRUCTURE**

## INVESTMENT OPTION STRUCTURE

Invest529 offers individual tax-advantaged Internal Revenue Code Section 529 savings accounts with a variety of investment options from which a participant may choose. The Board determines the investment options to be offered in Invest529. Invest529 has no state residency requirements, no age limits and is open year round. The risk of investment losses in Invest529 accounts rests with the participant. The primary investment objectives of Invest529 are to offer a set of investment options that:

- allow Invest529 participants to build portfolios consistent with their desired investment risk and return;
- provide a risk profile consistent with its position in the overall structure; and
- are managed so as to implement the desired risk profile and other investment characteristics.

In seeking to achieve diversity among the investment options offered, VA529 has established certain criteria to determine the material differences in investment options. The following technical factors should be used to classify and differentiate potential investment options:

- A distinct definable market and the availability of a widely used and understood benchmark;
- A distinct risk and return profile as exhibited by historical return analysis; and
- Use of a distinct management style that is definable in terms of the investment strategies/methodologies utilized (e.g., passive versus active management, growth vs. value).

### General Description of Invest529 Investment Options

- **Age-based portfolios** are balanced portfolios created by VA529 using external “best in class” investment management. The allocation of a portfolio evolves over time from a higher projected return/higher risk portfolio to a lower projected return/lower risk portfolio. The portfolio allocations are designed to take into account the beneficiary's current age and number of years before the beneficiary is expected to need funds for higher education expenses, although participants are not required to select the age-based portfolio that corresponds to the beneficiary's age. This option is aimed at those investors who desire a third party to manage their asset allocation and investment manager decisions. VA529 creates a new age-based portfolio every three years (at the higher end of the established risk/return spectrum). The asset allocations of the age-based portfolios will evolve according to the VA529 Rebalancing Policy so that by the end of the third year, the evolution to the next target stage of asset allocation is complete, with the exception of the portfolio which has

entered the final transition phase which will evolve to an allocation of 100% to stable value or an equivalent investment over a two-year period.

- **Static portfolios** are comprised of (i) balanced portfolios where the target asset allocation remains fixed and (ii) single asset class portfolios. Balanced portfolios and single asset class portfolios (actively or passively-managed) are provided so that an investor may construct their own custom portfolio.

## **AGE-BASED PORTFOLIOS**

### **Asset Allocation**

As previously discussed, each age-based portfolio is designed to take into account the beneficiary's age and account owner's investment time horizon or the number of years before the beneficiary is expected to need funds from the account for higher education expenses.

The appropriateness of the asset allocation for each portfolio will be examined by the Board every five years. At a minimum, the portfolios will be diversified across the following asset classes:

- U.S. Equity
- International Equity
- U.S. Fixed Income
- U.S. Stable Value

The asset allocation for each portfolio is provided in the Appendix.

### **Rebalancing**

Rebalancing will occur as needed according to the VA529 Rebalancing Policy. This provides for a smooth transition on the glide path towards the next target asset allocation stage. VA529 staff certifies and reports to management on a monthly basis whether portfolio components are properly balanced according to asset allocation parameters.

### **Portfolio Structure of Age-based Portfolios**

The Board may select a range of investment managers to manage the assets of the age-based portfolios. Both active and passive strategies can be used as can a variety of investment styles (value, growth, core).

A portfolio structure analysis to determine the percentage of assets allocated to active or passive managers, and to investment styles, will be conducted every five years.

Currently, the following investment strategies are used in these portfolios.

- Stable value (actively-managed)
- U.S. core fixed income (passively-managed)
- U.S. high yield fixed income (actively-managed)
- U.S. large cap equity (passively-managed)
- U.S. small cap equity (passively-managed)
- U.S. small/mid cap equity (actively-managed)
- International equity (actively-managed)
- Emerging markets equity (actively-managed)
- Emerging markets fixed income (actively-managed)
- U.S. Real Estate (passively-managed)
- Private Real Estate (actively-managed)

The benchmarks and peer groups used to measure performance are provided in Appendix B.

## **STATIC ACTIVELY-MANAGED BALANCED PORTFOLIOS**

These actively-managed balanced portfolios will be constructed based on the risk orientation of the individual investor rather than the investor's time horizon. These portfolios will invest in a mix of actively-managed and passively-managed assets.

Currently, the following investment strategies are used in these portfolios.

- Stable value (actively-managed)
- U.S. core fixed income (passively-managed)
- U.S. high yield fixed income (actively-managed)
- U.S. large cap equity (passively-managed)
- U.S. small cap equity (passively-managed)
- U.S. small/mid cap equity (actively-managed)
- International equity (actively-managed)
- Global small cap equity (actively-managed)
- Emerging markets equity (actively-managed)
- Emerging markets fixed income (actively-managed)
- U.S. Real Estate (passively-managed)
- Private Real Estate (actively-managed)



The benchmarks and peer groups used to measure performance are provided in Appendix B.

## **STATIC PASSIVELY-MANAGED BALANCED PORTFOLIOS**

These balanced portfolios will be constructed based on the risk orientation of the individual investor rather than the investor's time horizon.

At a minimum, the following risk-based portfolios will be offered:

- Aggressive Growth (equity allocation greater than 70%)
- Moderate Growth (equity allocation between 40% and 70%)
- Conservative Income (equity allocation less than 40%)

Currently, the following investment strategies are used in these portfolios.

- U.S. core fixed income (passively-managed)
- International fixed income (passively-managed)
- U.S. broad market equity (passively-managed)
- International equity (passively-managed)

## **STATIC SINGLE ASSET CLASS PORTFOLIOS**

These portfolios will be offered such that they along with other Invest529 and Plan programs, will provide sufficient investment options such that a Plan investor/participant could construct a portfolio to meet their college savings goals based on the individual investor's risk orientation, time horizon, etc.

At a minimum, portfolios providing the ability to invest in the following asset classes are to be provided:

- U.S. Equity
- International Equity
- U.S. Investment Grade Fixed Income

Currently, the following investment strategies are used in these portfolios.

- U.S. core fixed income (passively-managed)
- U.S. Treasury inflation-protected securities (actively-managed)
- U.S. broad market equity (passively-managed)
- International equity (passively-managed)

- U.S. Real Estate (passively-managed)
- Socially responsible equity income fund (actively-managed)
- FDIC-Insured Account
- Stable value (actively-managed)

# **IV. INVESTMENT MANAGER SELECTION, MONITORING AND TERMINATION**

## BACKGROUND

The Board reserves the right to add, delete or replace investment managers based upon inability to meet performance guidelines outlined in this policy or other factors affecting the continuing viability of the portfolio. Either separately managed portfolios, commingled funds or mutual funds may be used in Invest529.

## SELECTION – GENERAL CRITERIA

When selecting funds for Invest529, the following six broad categories should be considered:

- Economies of Scale
- Diversification
- Transparency
- Organizational Strength
- Performance Consistency
- Risk/ Reward

The following *basic* selection criteria are to be used when selecting a new investment manager to be added to Invest529 or when selecting a replacement manager for an existing asset class. These criteria have been classified according to the categories listed above.

### Economies of Scale

- Have at least \$500 million in assets under management.
- Have a reasonable expense ratio or fees compared to other vehicles within an appropriate peer group

### Diversification

- No more than 10% of the portfolio may be invested in any one company valued at market. Likewise, appropriate risk controls may be outlined in each investment manager agreement with respect to sector and industry weightings relative to an appropriate benchmark.

### Transparency

- Employ an investment process that is well defined.
- Invest in securities consistent with the vehicle's strategy<sup>2</sup>.
- Agree to meet all other requirements set forth in this Statement. However, all mutual funds, collective trusts, and similar commingled fund vehicles included in Invest529 will also be subject to the investment guidelines as set forth in their prospectuses, or applicable offering documents.

### Organizational Strength

- Be supported by qualified personnel and appropriate resources.

### Performance Consistency

- Have a minimum of 3 years of verifiable investment performance information<sup>3</sup>.
- Have competitive returns versus an appropriate benchmark index and peer group.

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<sup>2</sup> For instance, large cap growth vehicles should primarily focus on large cap stocks with growth-oriented characteristics.

<sup>3</sup> Vehicles with less than 3 years of history may be tactical or opportunities investments where strategies often close quickly due to liquidity constraints.

### Risk/ Reward

- Have acceptable volatility relative to an appropriate benchmark index. Greater volatility than the benchmark should be commensurate with a higher return.

## **INVESTMENT MANAGER SEARCHES – COMMITMENT TO DIVERSITY**

The Board is committed to seeking diversity in the ownership, management, and staffing of firms with which the Plan does business, including investment managers. Accordingly, whenever a manager search is directed by the Plan, the Plan’s investment consultant will include in its research report information on the ownership structure of each firm and publicly available data on ownership by women and minorities. In addition, if managers are interviewed by the Committee, the Plan’s investment consultant will request that each candidate include in their respective presentation a discussion of the candidate’s overall commitment to diversity and a review of the distribution in each level of the organization by gender and ethnicity in order to obtain information on the firm’s diversity. Other information may be provided at the candidate’s discretion to demonstrate their firm’s commitment. Such information shall be considered in evaluating potential investment managers, with the primary criteria remaining those outlined under General Criteria above, in accordance with the fiduciary obligations of the Board.

## **PERFORMANCE MONITORING**

The Board shall periodically, but not less than quarterly, evaluate investment managers. Each actively-managed investment option will be measured against its benchmark and peer group for the measurement periods outlined below. The ability to meet the benchmark comparison on a net of fees basis will be a primary measure of performance. In addition to monitoring performance, consideration will be given to risk adjusted metrics.

<i>Measurement Period</i>	<i>Benchmark Comparison</i>	<i>Peer Group Comparison</i>
Multiple rolling 3-year periods	<ul style="list-style-type: none"><li>• The total rate of return should exceed the return of the benchmark index over most rolling periods.<sup>4</sup></li></ul>	<ul style="list-style-type: none"><li>• The total rate of return should exceed the median return of the fund’s peer group over most rolling periods.<sup>4</sup></li></ul>

<sup>4</sup> Measured over the latest 12 quarters available for review.

For the managers that do not have a 3-year track record with Invest529, the manager's separate account composite or mutual fund performance will be used for evaluation. The manager may also be placed on watch within a lesser period if the strategy deviates from the universe and benchmark dramatically and in a manner that would not have been expected given the tracking error expectations of the strategy.

If the investment manager utilizes a passively-managed strategy, the portfolio will be monitored on its ability to successfully track the risk and return characteristics of the stated benchmark. Peer group performance will not be required for passive strategies.

In addition to monitoring investment performance results, the Board may periodically evaluate the investment managers on the basis of the following factors to ascertain whether they should continue to be utilized in Invest529:

- the stability and depth of the investment professionals responsible for the management of this strategy;
- the suitability of its investment approach for Invest529;
- its management fees; and
- any other measures the Board deems useful and relevant.

### **Watch List Status & Termination**

If an investment manager fails to meet the minimum standards of investment performance outlined in this document, the Board has the discretion to place the manager on a 'watch list' for a year. The following are some examples of reasons for termination or placing an investment manager on the watch list:

- significant change in portfolio management, ownership or control;
- significant change in portfolio management style;
- substantive change in portfolio turnover; and
- continued performance shortfalls versus the peer group or benchmark.

Reasons for termination without a probationary period may include, but are not limited to:

- any violation of SEC, or other applicable authority, rules or regulations, as well as any other important and appropriate statutory regulatory requirements;
- operational difficulties concerning fund transfers or pricing;
- substantial and consistent deviation from the characteristics of its investment category; and
- failure to adhere to guidelines in this Statement or in the investment management agreement.

By the end of the watch list period, the Board will evaluate the investment manager and determine whether:

- the investment manager remains on the watch list for an additional specified period of time;
- the investment manager is removed from the watch list; or
- the investment manager is terminated.

## **V. SUPPLEMENTAL ITEMS**

## **PROXY VOTING**

Proxies will be voted for the benefit of the Plan.

### **Proposals Related to Funds and other Securities**

The Board may delegate the voting of proxies to others (e.g., the Investment Advisory Committee, appropriate VA529 Management, the investment managers or a qualified third party). In addition, the Board may require periodic reporting of the proxy voting activity by any person to whom such power has been delegated.

If a qualified third party is retained to manage the proxy voting activities for VA529, a review of the guidelines used to vote proxies will be conducted annually by VA529 Management. In addition, the third party will provide reports every calendar quarter to appropriate VA529 Management as to the proxies voted.

## **SECURITIES LENDING**

Securities lending is not allowed in the separate accounts in Invest529, unless specifically approved by the Board. However, some of the investment vehicles, such as mutual funds, collective trusts, and similar commingled fund vehicles may engage in securities lending if so allowed by their prospectus or applicable offering documents.

## **ACCEPTANCE AND ADOPTION**

The Board of the Virginia College Savings Plan has approved and adopted this restated Statement of Investment Policy and Guidelines as of December 13, 2017.



## APPENDIX A: ASSET ALLOCATION

The table below outlines the initial allocation of assets for the age-based portfolios as of January 1 of each of the below referenced years.

	Initial Target Allocation as of						
Invest529 Portfolio	January 2018	January 2021	January 2024	January 2027	January 2030	January 2033	January 2036
<b>2036 Portfolio Ages 0-3</b>	80% Stock 20% Fixed Income	70% Stock 30% Fixed Income	60% Stock 40% Fixed Income	50% Stock 50% Fixed Income	40% Stock 60% Fixed Income	25% Stock 75% Fixed Income	0% Stock 100% Fixed Income
<b>2033 Portfolio Ages 4-6</b>	70% Stock 30% Fixed Income	60% Stock 40% Fixed Income	50% Stock 50% Fixed Income	40% Stock 60% Fixed Income	25% Stock 75% Fixed Income	0% Stock 100% Fixed Income	
<b>2030 Portfolio Ages 7-9</b>	60% Stock 40% Fixed Income	50% Stock 50% Fixed Income	40% Stock 60% Fixed Income	25% Stock 75% Fixed Income	0% Stock 100% Fixed Income		
<b>2027 Portfolio Ages 10-12</b>	50% Stock 50% Fixed Income	40% Stock 60% Fixed Income	25% Stock 75% Fixed Income	0% Stock 100% Fixed Income			
<b>2024 Portfolio Ages 13-15</b>	40% Stock 60% Fixed Income	25% Stock 75% Fixed Income	0% Stock 100% Fixed Income				
<b>2021 Portfolio Ages 16-18</b>	25% Stock 75% Fixed Income	0% Stock 100% Fixed Income					
<b>2018 Portfolio Over Age 18</b>	0% Stock 100% Fixed Income						

## APPENDIX B: BENCHMARKS & PEER GROUPS

The table below outlines the target benchmarks and peer groups for the Invest529 portfolios. The table uses the initial target allocations as of January 1, 2018.

<u>Portfolio</u>	<u>Category</u>	<u>Benchmark</u>	<u>Peer Group</u>
80% Equity / 20% Fixed Income	Age-Based Portfolios	17.5% S&P 500 / 11.25% Russell 2500/ 3.75% CRSP US Small Cap Index / 17.5% MSCI ACWI ex US / 15% MSCI Emerging Markets / 15% NCREIF NFI ODCE / MSCI REIT / 5% Bloomberg Barclays U.S. High Yield Ba/B 1% Issuer Cap Index / 5% JP Morgan Emerging Bond Market Index Global Diversified / 7.5% Bloomberg Barclays U.S. Aggregate Float Adjusted / 2.5% 3-Month T-Bills + 100 basis points	NA
70% Equity / 30% Fixed Income	Age-Based Portfolios	17.5% S&P 500 / 8.33% Russell 2500/ 4.17% CRSP US Small Cap Index / 17.5% MSCI ACWI ex US / 12.5% MSCI Emerging Markets / 10% NCREIF NFI ODCE / MSCI REIT / 5% Bloomberg Barclays U.S. High Yield Ba/B 1% Issuer Cap Index / 7.5% JP Morgan Emerging Bond Market Index Global Diversified / 10% Bloomberg Barclays U.S. Aggregate Float Adjusted / 7.5% 3-Month T-Bills + 100 basis points	NA
60% Equity / 40% Fixed Income	Age-Based Portfolios	15% S&P 500 / 6.67% Russell 2500/ 3.33% CRSP US Small Cap Index / 15% MSCI ACWI ex US / 10% MSCI Emerging Markets / 10% NCREIF NFI ODCE / MSCI REIT / 5% Bloomberg Barclays U.S. High Yield Ba/B 1% Issuer Cap Index / 7.5% JP Morgan Emerging Bond Market Index Global Diversified / 12.5% Bloomberg Barclays U.S. Aggregate Float Adjusted / 15% 3-Month T-Bills + 100 basis points	NA
50% Equity / 50% Fixed Income	Age-Based Portfolios	13.75% S&P 500 / 3.75% Russell 2500/ 3.75% CRSP US Small Cap Index/ 13.75% MSCI ACWI ex US / 7.5% MSCI Emerging Markets / 7.5% NCREIF NFI ODCE / MSCI REIT / 5% Bloomberg Barclays U.S. High Yield Ba/B 1% Issuer Cap Index / 10% JP Morgan Emerging Bond Market Index Global Diversified / 15% Bloomberg Barclays U.S. Aggregate Float Adjusted / 20% 3-Month T-Bills + 100 basis points	NA
40% Equity / 60% Fixed Income	Age-Based Portfolios	12.5% S&P 500 / 2.5% Russell 2500/ 2.5% CRSP US Small Cap Index / 12.5% MSCI ACWI ex US / 5% MSCI Emerging Markets / 5% NCREIF NFI ODCE / MSCI REIT / 5% Bloomberg Barclays U.S. High Yield Ba/B 1% Issuer Cap Index / 10% JP Morgan Emerging Bond Market Index Global Diversified / 17.5% Bloomberg Barclays U.S. Aggregate Float Adjusted / 27.5% 3-Month T-Bills + 100 basis points	NA
25% Equity / 75% Fixed Income	Age-Based Portfolios	7.5% S&P 500 / 1.25% Russell 2500/ 1.25% CRSP US Small Cap Index/ 7.5% MSCI ACWI ex US / 2.5% MSCI Emerging Markets / 5% NCREIF NFI ODCE / MSCI REIT / 5% Bloomberg Barclays U.S. High Yield Ba/B 1% Issuer Cap Index / 10% JP Morgan Emerging Bond Market Index Global Diversified / 20% Bloomberg Barclays U.S. Aggregate Float Adjusted / 40% 3-Month T-Bills + 100 basis points	NA
100% Fixed Income (Transition)	Age-Based Portfolios	5% Bloomberg Barclays U.S. High Yield Ba/B 1% Issuer Cap Index / 10% JP Morgan Emerging Bond Market Index Global Diversified / 20% Bloomberg Barclays U.S. Aggregate Float Adjusted / 65% 3-Month T-Bills + 100 basis points	NA
100% Fixed Income (Stable Value)	Static, Single Asset Class Portfolio	100% 3-Month T-Bills + 100 basis points	NA

## APPENDIX B: BENCHMARKS & PEER GROUPS (CONTINUED)

<u>Portfolio</u>	<u>Category</u>	<u>Benchmark</u>	<u>Peer Group</u>
Conservative Portfolio	Static, Balanced	56% Bloomberg Barclays U.S. Aggregate Float Adjusted / 12% CRSP US Total Market / 8% FTSE Global All Cap ex US / 24% Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped	NA
Moderate Portfolio	Static, Balanced	36% CRSP US Total Market / 28% Bloomberg Barclays U.S. Aggregate Float Adjusted / 12% Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped / 24% FTSE Global All Cap ex US	NA
Aggressive Portfolio	Static, Balanced	48% CRSP US Total Market / 14% Bloomberg Barclays U.S. Aggregate Float Adjusted / 6% Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped / 32% FTSE Global All Cap ex US	NA
Total Stock Index Portfolio	Static, Single Asset Class Portfolio	CRSP US Total Market Index	NA
Total Bond Index Portfolio	Static, Single Asset Class Portfolio	Bloomberg Barclays U.S. Aggregate Float Adjusted Index	NA
International Stock Index Portfolio	Static, Single Asset Class Portfolio	FTSE Global All Cap ex US Index	NA
Inflation Protected Securities Portfolio	Static, Single Asset Class Portfolio	Bloomberg Barclays Capital US Treasury Inflation Protected Index	NA
REIT Index Portfolio	Static, Single Asset Class Portfolio	MSCI REIT Index	NA
FDIC-Insured Savings Account	Static, Single Asset Class Portfolio	Federal Reserve Bank of New York Overnight Bank Funding Rate less 50 basis points	NA
Socially Targeted Portfolio	Static, Single Asset Class Portfolio	S&P 500	NA
Global Equity Portfolio	Static, Equity	40% CRSP US Total Market / 7% Russell 2500 / 39% MSCI ACWI ex US / 14% MSCI ACWI Small Cap	NA
Active Conservative Portfolio	Static, Balanced	7.5% S&P 500 / 1.25% Russell 2500/ 1.25% CRSP US Small Cap Index/ 7.5% MSCI ACWI ex US / 2.5% MSCI Emerging Markets / 5% NCREIF NFI ODCE / MSCI REIT / 5% Bloomberg Barclays U.S. High Yield Ba/B 1% Issuer Cap Index / 10% JP Morgan Emerging Bond Market Index Global Diversified / 20% Bloomberg Barclays U.S. Aggregate Float Adjusted / 40% 3-Month T-Bills + 100 basis points	NA
Active Moderate Portfolio	Static, Balanced	13.75% S&P 500 / 3.75% Russell 2500/ 3.75% CRSP US Small Cap Index/ 13.75% MSCI ACWI ex US / 7.5% MSCI Emerging Markets / 7.5% NCREIF NFI ODCE / MSCI REIT / 5% Bloomberg Barclays U.S. High Yield Ba/B 1% Issuer Cap Index / 10% JP Morgan Emerging Bond Market Index Global Diversified / 15% Bloomberg Barclays U.S. Aggregate Float Adjusted / 20% 3-Month T-Bills + 100 basis points	NA
Active Aggressive Portfolio	Static, Balanced	17.5% S&P 500 / 11.25% Russell 2500/ 3.75% CRSP US Small Cap Index / 17.5% MSCI ACWI ex US / 15% MSCI Emerging Markets / 15% NCREIF NFI ODCE / MSCI REIT / 5% Bloomberg Barclays U.S. High Yield Ba/B 1% Issuer Cap Index / 5% JP Morgan Emerging Bond Market Index Global Diversified / 7.5% Bloomberg Barclays U.S. Aggregate Float Adjusted / 2.5% 3-Month T-Bills + 100 basis points	NA

## APPENDIX B: BENCHMARKS & PEER GROUPS (CONTINUED)

<b>Asset Class</b>	<b>Benchmark</b>	<b>Peer Group</b>
Stable Value	3-Month T-Bills + 100bps	Stable Value Funds
U.S. Core Fixed Income/Passively-Managed	Bloomberg Barclays U.S. Aggregate Float Adjusted Index	NA
U.S. Large Cap Equity/Passively-Managed	S&P 500 Index	NA
U.S. Small Cap Equity/Passively-Managed	CRSP US Small Cap Index	NA
U.S. Small/Mid Cap Equity/Actively-Managed	Russell 2500 Index	Small/Mid Cap Equity Managers
Emerging Markets Debt/Actively-Managed	JP Morgan EMBI Global Diversified	Emerging Markets Debt Mutual Funds
Emerging Markets Equity/Actively-Managed	MSCI Emerging Markets Index	Emerging Markets Equity Mutual Funds
U.S. High Yield Fixed Income/Actively-Managed	Bloomberg Barclays U.S. High Yield Ba/B 1% Issuer Cap Index	U.S. High Yield Fixed Income Managers
Private Real Estate/Actively-Managed	NCREIF NFI ODCE / MSCI REIT	Private Real Estate
International Equity/Actively-Managed	MSCI ACWI ex US	International Equity Mutual Funds
Global Small Cap Equity	MSCI All Country World Small Cap Index	Global Small Cap Equity Mutual Funds

**Virginia College Savings Plan  
Statement of Investment Policy and  
Guidelines  
For**

**Virginia529 ABLEnow<sup>SM</sup>**

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# **I. PURPOSE & RESPONSIBILITIES**

## **PURPOSE**

The purpose of this Statement of Investment Policy and Guidelines (“Statement”) is to identify a set of investment objectives, guidelines and performance standards for Virginia529 ABLEnow (“ABLEnow”). This Statement represents the formal investment policy document for ABLEnow and is to be communicated to the investment managers for their use in developing an appropriate investment portfolio. This document will also be used by the Board as the basis for future investment management decisions, measurement, and evaluation of investment performance of ABLEnow.

This Statement will be reviewed at least annually by the Board to ensure that it is consistent with the investment needs of ABLEnow.

## **RESPONSIBILITIES**

### **Board**

Pursuant to § 23.1-704 of the Code of Virginia (“Code”), the Board shall administer the Virginia College Savings Plan (“VA529” or the “Plan”) and shall develop and implement a program for contributions to ABLE savings trust accounts established pursuant to this chapter on behalf of a qualified beneficiary in order to apply distributions from the account toward qualified disability expenses for an eligible individual, as both such terms are defined in § 529A of the Internal Revenue Code of 1986, as amended, or other applicable federal law. In addition, pursuant to § 23.1-704 of the Code, the Board shall invest moneys in the Plan in any instruments, obligations, securities, or property deemed appropriate by the Board.

The Board is authorized to delegate certain responsibilities to qualified agents to assist them in properly meeting the overall Board responsibilities as outlined above. Specifically, the Board relies on the advice, guidance and actions of VA529 Management, the Investment Advisory Committee, third party administrator, investment managers, an investment consultant and legal counsel to perform various functions. The various roles and duties of each are further described below.

### **VA529 Management**

VA529 Management, comprised of the Chief Executive Officer (“CEO”) and such other senior officers as may be appointed by the CEO, shall implement decisions approved by the Board and/or Investment Advisory Committee unless otherwise specifically provided by the Board or the Investment Advisory Committee. VA529 Management shall (i) appoint a third party administrator (ii) oversee the development, structure, evaluation and implementation of ABLEnow’s strategic goals and objectives and (iii) with the assistance of the Investment Advisory Committee appointed



by the Board, and by investment consultants, direct and manage ABLEnow's assets and programs, and (iv) report periodically and as requested to the Board.

### **Investment Advisory Committee**

According to § 23.1-702 of the Code, the Board of VA529 shall appoint an Investment Advisory Committee ("Committee"), the purpose of which is to assist the Board in fulfilling its fiduciary duty as trustee of VA529's funds and to assist VA529 Management in directing, managing, and administering VA529's assets, and to provide the Board with sophisticated, objective and prudent investment advice and direction on all matters related to the management of investments, within the parameters set by the Statement, as it may be amended from time to time. While this Statement refers to the responsibilities and duties of the Board, some of these responsibilities and duties may be delegated to the Committee via the Committee Charter<sup>1</sup>.

The Committee shall be comprised and administered in accordance with the Committee Charter, as it may be amended from time to time by the Board. The Committee shall review VA529's investments and is authorized to make decisions with regard to investment managers. The Committee is further authorized to take any additional action specifically authorized in other Board actions. Recommendations are not binding upon the Board.

The Committee shall report any action taken to the Board at the Board's next meeting.

### **Third Party Administrator**

The Plan shall contract on behalf of the Board with a third party administrator which shall have a level of experience and expertise in providing services as required to administer ABLEnow. The administrator shall act as a fiduciary in the administration of the ABLEnow accounts utilizing appropriate internal controls to insure the safety of the assets from such things as fraud, collusion, loss, diversion, etc. While the specific duties and responsibilities of the Plan's administrator are contained in the contractual agreement between the administrator and the Plan, the administrator, in general, has the following responsibilities:

- to handle all income, cash transactions, interest received, and other necessary activities;
- hold or contract with a custodian to hold all securities on behalf of ABLEnow and only transact with regard to ABLEnow investment options upon proper instruction from those authorized to provide such instruction or direction;

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<sup>1</sup> The Committee Charter of the Virginia College Savings Plan Investment Advisory Committee was revised by the Board on December 8, 2016.

- safekeep or contract for the safekeeping all ABLEnow assets including securities, cash and cash equivalents; and
- provide monthly transaction accounting on security holdings with reports provided to the appropriate VA529 Management in a timely manner.
- provide VA529 Management with a monthly accounting of assets;
- issue a quarterly report to the Board and/or their designees which includes the following information:
  - the market value of account assets as of the last business day of each quarter;
  - the portion of account assets allocated to each investment asset class as of the last business day of each quarter;
  - time-weighted rates of return measured net of investment management fees and all expenses or gross of fees (as appropriate) for the current quarter, year-to-date and historical time periods;
  - average account characteristics and number of holdings as of the last business day of each quarter; and
  - expenses.

### **Investment Consultant**

While the specific duties and responsibilities of the Plan's investment consultant are contained in the contractual agreement between the investment consultant and the Plan, the consultant, in general, has the following responsibilities and will assist the Board and Committee with the following functions:

- provide evaluation of the investment results achieved by the designated investment managers in light of the investment guidelines and performance standards contained in this Statement;
- make recommendations to the Board of appropriate actions to be considered which, in the consultant's opinion, will enhance the probability of achieving overall investment program objectives. Such recommendations may include, but are not limited to:
  - use of alternate asset strategies or asset classes;
  - changes in overall investment policy;
  - changes in designated investment managers;
- provide assistance to the Board and/or Committee in screening and selecting investment managers, as appropriate; and
- at a minimum, meet with the Committee and Board every quarter.

## **Legal Counsel**

The VA529 General Counsel shall advise and represent the Board in all matters requiring legal insight and advice. VA529 Management, in consultation with the General Counsel, shall utilize the services of outside counsel and/or the Office of the Attorney General as such services may be required from time to time.

## **Investment Managers**

While the specific duties and responsibilities of the Plan's investment managers are contained in each contractual agreement between the designated investment manager and the third party administrator, investment managers, in general, have the following responsibilities:

- maintain registration as an investment advisor under the Investment Advisers Act of 1940, or be authorized and regulated by another appropriate authority;
- adhere to the policy guidelines contained in this Statement, unless granted an exception in writing;
- invest only in those asset classes, and adhere to the ranges for allocation among those classes, that the Board has stated to be appropriate for that manager's portfolio;
- exercise complete investment discretion within the boundaries of the restrictions outlined in this Statement or in any written exceptions to this Statement;
- strictly comply with all of the provisions of appropriate law as they pertain to the firm's dealings, functions and responsibilities as fiduciaries;
- prudently liquidate assets in the portfolio which cease to be in compliance with this Statement or any written exceptions to this Statement. If in the manager's judgment, it is in ABLEnow's best interest to not liquidate such an asset promptly, the manager will advise VA529 management of the circumstances and make a recommendation regarding the liquidation of that asset;
- diversify the portfolio unless, under the circumstances, it is clearly prudent to not so diversify;
- ensure that brokers will be selected only on a competitive, best execution basis;
- invest the assets with care, skill, prudence and diligence under 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 such aims;

- acknowledge in writing the recognition and acceptance of full responsibility as a fiduciary, and the firm's intention to comply with this Statement as it currently exists or as is modified by joint agreement in the future.

## **II. ALLOWABLE INVESTMENTS**

## ALLOWABLE INVESTMENTS

Pursuant to § 23.1-706 of the Code, as amended, the Board is authorized to acquire and retain every kind of property and any kind of investment, and to retain property properly acquired, without time limitation and without regard to its suitability for original purpose, specifically including but not limited to:

- Debentures and other corporate obligations of foreign or domestic corporations;
- Common or preferred stocks traded on foreign or domestic stock exchanges;
- Not less than all of the stock or 100 percent ownership of a corporation or other entity organized by the Board under the laws of the Commonwealth for the purpose of acquiring and retaining real property that the Board is authorized to acquire and retain;
- Unregistered securities, often referred to as letter stock or private placements, including limited partnerships and 144A securities;
- Securities of any open-end or closed-end management type investment company or investment trust registered under the federal Investment Company Act of 1940, as amended, including such investment companies or investment trusts which, in turn, invest in the securities of such investment companies or investment trusts. Also permitted are pooled investments, including collective trusts and similar commingled fund vehicles, which may be used as an alternative to a mutual fund investment;
- Bonds, notes or other obligations of the Commonwealth or its agencies and instrumentalities.

### **Commingled Funds, Collective Trusts and Mutual Funds**

The guidelines in this Statement have been established to ensure that the investments of each investment manager are in keeping with the return and risk objectives of ABLEnow. However, in attempting to meet these objectives, it may be advantageous for a portion of portfolio assets to be placed in a pooled, commingled, collective trust, or mutual fund which may have specific restrictions, policies, or guidelines that conflict from time-to-time with those outlined in this Statement. To the extent that the Board has reviewed the investment guidelines of such funds, and determined their appropriateness to ABLEnow's investment objectives, the restrictions, policies and guidelines in the funds' prospectus or offering statement shall take precedence over those stated in this Statement.

# **III. ABLEnow PROGRAM STRUCTURE**

## INVESTMENT OPTION STRUCTURE

The Virginia529 ABLEnow offers individual tax-advantaged Internal Revenue Code Section 529A disability savings accounts with a variety of investment options from which a participant may choose. The Board determines the investment options to be offered in ABLEnow. The risk of investment losses in ABLEnow accounts rests with the participant. The primary investment objectives of ABLEnow are to offer a set of investment options that:

- allow ABLEnow participants to build portfolios consistent with their desired investment risk and return;
- provide a risk profile consistent with its position in the overall structure; and
- are managed so as to implement the desired risk profile and other investment characteristics.

In seeking to achieve diversity among the investment options offered, VA529 has established certain criteria to determine the material differences in investment options. The following technical factors should be used to classify and differentiate potential investment options:

- A distinct definable market and the availability of a widely used and understood benchmark;
- A distinct risk and return profile as exhibited by historical return analysis; and
- Use of a distinct management style that is definable in terms of the investment strategies/methodologies utilized (e.g., passive versus active management, growth vs. value).

### ABLEnow Investment Options

- **Static passively-managed balanced portfolios** are comprised of balanced portfolios where the target asset allocation remains fixed.
- **Money market portfolio** that invests primarily in high-quality, short-term money market instruments. The money market portfolio shall also serve as the default investment option for ABLEnow account owners who do not select an investment option.

## STATIC PASSIVELY-MANAGED BALANCED PORTFOLIOS

These balanced portfolios will be constructed based on the risk orientation of the individual investor rather than the investor's time horizon.



At a minimum, the following risk-based portfolios will be offered:

- Aggressive Growth (equity allocation greater than 70%)
- Moderate Growth (equity allocation between 40% and 70%)
- Conservative Income (equity allocation less than 40%)

Currently, the following investment strategies are used in these portfolios.

- Aggressive Growth - mutual fund seeking long-term capital appreciation through a fund of funds structure with a balanced allocation of 80% stocks and 20% bonds. Fund is 100% indexed.
- Moderate Growth - mutual fund seeking capital appreciation and a reasonable level of current income through a fund of funds structure with a balanced allocation of 60% stocks and 40% bonds. Fund is 100% indexed.
- Conservative Income - mutual fund seeking current income through a fund of funds structure with a balanced allocation: 20% stocks, 60% bonds, and 20% short-term reserves. Fund is 100% indexed.

## **MONEY MARKET PORTFOLIO**

The money market portfolio seeks to provide current income and preserve the principal investment by maintaining a share price of \$1. The portfolio invests in short-term money market instruments, which may include short-term securities issued by the U.S. government and its agencies and instrumentalities.

# **IV. INVESTMENT MANAGER SELECTION, MONITORING AND TERMINATION**

## BACKGROUND

The Board reserves the right to add, delete or replace investment managers based upon inability to meet performance guidelines outlined in this policy or other factors affecting the continuing viability of the portfolio. Either separately managed portfolios, commingled funds or mutual funds may be used in ABLEnow.

## SELECTION – GENERAL CRITERIA

When selecting funds for ABLEnow, the following six broad categories should be considered:

- Economies of Scale
- Diversification
- Transparency
- Organizational Strength
- Performance Consistency
- Risk/ Reward

The following *basic* selection criteria are to be used when selecting a new investment manager to be added to ABLEnow or when selecting a replacement manager for an existing asset class. These criteria have been classified according to the categories listed above.

### Economies of Scale

- Have at least \$500 million in assets under management.
- Have a reasonable expense ratio or fees compared to other vehicles within an appropriate peer group

### Diversification

- No more than 10% of the portfolio may be invested in any one company valued at market. Likewise, appropriate risk controls may be outlined in each investment manager agreement with respect to sector and industry weightings relative to an appropriate benchmark.

### Transparency

- Employ an investment process that is well defined.
- Invest in securities consistent with the vehicle's strategy<sup>2</sup>.
- Agree to meet all other requirements set forth in this Statement. However, all mutual funds, collective trusts, and similar commingled fund vehicles included in ABLEnow will also be subject to the investment guidelines as set forth in their prospectuses, or applicable offering documents.

### Organizational Strength

- Be supported by qualified personnel and appropriate resources.

### Performance Consistency

- Have a minimum of 3 years of verifiable investment performance information<sup>3</sup>.
- Have competitive returns versus an appropriate benchmark index and peer group.

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<sup>2</sup> For instance, large cap growth vehicles should primarily focus on large cap stocks with growth-oriented characteristics.

<sup>3</sup> Vehicles with less than 3 years of history may be tactical or opportunities investments where strategies often close quickly due to liquidity constraints.

### Risk/ Reward

- Have acceptable volatility relative to an appropriate benchmark index. Greater volatility than the benchmark should be commensurate with a higher return.

## **INVESTMENT MANAGER SEARCHES – COMMITMENT TO DIVERSITY**

The Board is committed to seeking diversity in the ownership, management, and staffing of firms with which the Plan does business, including investment managers. Accordingly, whenever a manager search is directed by the Plan, the Plan’s investment consultant will include in its research report information on the ownership structure of each firm and publicly available data on ownership by women and minorities. In addition, if managers are interviewed by the Committee, the Plan’s investment consultant will request that each candidate include in their respective presentation a discussion of the candidate’s overall commitment to diversity and a review of the distribution in each level of the organization by gender and ethnicity in order to obtain information on the firm’s diversity. Other information may be provided at the candidate’s discretion to demonstrate their firm’s commitment. Such information shall be considered in evaluating potential investment managers, with the primary criteria remaining those outlined under General Criteria above, in accordance with the fiduciary obligations of the Board.

## **PERFORMANCE MONITORING**

The Board shall periodically, but not less than quarterly, evaluate investment managers. Each actively-managed investment option will be measured against its benchmark and peer group for the measurement periods outlined below. The ability to meet the benchmark comparison on a net of fees basis will be a primary measure of performance. In addition to monitoring performance, consideration will be given to risk adjusted metrics.

<i>Measurement Period</i>	<i>Benchmark Comparison</i>	<i>Peer Group Comparison</i>
Multiple rolling 3-year periods	<ul style="list-style-type: none"><li>• The total rate of return should exceed the return of the benchmark index over most rolling periods.<sup>4</sup></li></ul>	<ul style="list-style-type: none"><li>• The total rate of return should exceed the median return of the fund’s peer group over most rolling periods.<sup>4</sup></li></ul>

<sup>4</sup> Measured over the latest 12 quarters available for review.

For the managers that do not have a 3-year track record with ABLEnow, the manager's separate account composite or mutual fund performance will be used for evaluation. The manager may also be placed on watch within a lesser period if the strategy deviates from the universe and benchmark dramatically and in a manner that would not have been expected given the tracking error expectations of the strategy.

If the investment manager utilizes a passively-managed strategy, the portfolio will be monitored on its ability to successfully track the risk and return characteristics of the stated benchmark. Peer group performance will not be required for passive strategies.

In addition to monitoring investment performance results, the Board may periodically evaluate the investment managers on the basis of the following factors to ascertain whether they should continue to be utilized in ABLEnow:

- the stability and depth of the investment professionals responsible for the management of this strategy;
- the suitability of its investment approach for ABLEnow;
- its management fees; and
- any other measures the Board deems useful and relevant.

### **Watch List Status & Termination**

If an investment manager fails to meet the minimum standards of investment performance outlined in this document, the Board has the discretion to place the manager on a 'watch list' for a year. The following are some examples of reasons for termination or placing an investment manager on the watch list:

- significant change in portfolio management, ownership or control;
- significant change in portfolio management style;
- substantive change in portfolio turnover; and
- continued performance shortfalls versus the peer group or benchmark.

Reasons for termination without a probationary period may include, but are not limited to:

- any violation of SEC, or other applicable authority, rules or regulations, as well as any other important and appropriate statutory regulatory requirements;
- operational difficulties concerning fund transfers or pricing;
- substantial and consistent deviation from the characteristics of its investment category; and
- failure to adhere to guidelines in this Statement or in the investment management agreement.

By the end of the watch list period, the Board will evaluate the investment manager and determine whether:

- the investment manager remains on the watch list for an additional specified period of time;
- the investment manager is removed from the watch list; or
- the investment manager is terminated.

## **V. SUPPLEMENTAL ITEMS**

## **PROXY VOTING**

Proxies will be voted for the benefit of the Plan.

### **Proposals Related to Funds and other Securities**

The Board may delegate the voting of proxies to others (e.g., the Investment Advisory Committee, appropriate VA529 Management, the investment managers or a qualified third party). In addition, the Board may require periodic reporting of the proxy voting activity by any person to whom such power has been delegated.

If a qualified third party is retained to manage the proxy voting activities for VA529, a review of the guidelines used to vote proxies will be conducted annually by VA529 Management. In addition, the third party will provide reports every calendar quarter to appropriate VA529 Management as to the proxies voted.

## **ACCEPTANCE AND ADOPTION**

The Board of the Virginia College Savings Plan has approved and adopted this restated Statement of Investment Policy and Guidelines as of March 27, 2019.

## APPENDIX A: BENCHMARKS

The table below outlines the target benchmarks for the ABLEnow portfolios.

<b><u>Manager/Portfolio</u></b>	<b><u>Category</u></b>	<b><u>Benchmark</u></b>
Conservative Income Portfolio	Static, Balanced	56% Bloomberg Barclays U.S. Aggregate Float Adjusted Index / 24% Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped Index / 12% CRSP US Total Market Index / 8% FTSE Global All Cap ex US Index
Moderate Growth Portfolio	Static, Balanced	36% CRSP US Total Market Index / 28% Bloomberg Barclays U.S. Aggregate Float Adjusted Index / 24% FTSE Global All Cap ex US Index / 12% Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped Index
Aggressive Growth Portfolio	Static, Balanced	48% CRSP US Total Market Index / 32% FTSE Global All Cap ex US Index / 14% Bloomberg Barclays U.S. Aggregate Float Adjusted Index / 6% Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped Index
Money Market Portfolio	Static, Balanced	Citigroup 3-Month Treasury Bill Index