

#### VIRGINIA COLLEGE SAVINGS PLAN 9001 Arboretum Parkway, North Chesterfield, VA 23236

Mary G. Morris Chief Executive Officer (804) 371 0766

January 18, 2017

Hal E. Greer
Director
Joint Legislative Audit and Review Commission
201 North 9th Street
General Assembly Building, Suite 1100
Richmond, Virginia 23219

Dear Mr. Greer:

On December 12, 2016, as required by Va. Code §30-332 (A), the Virginia College Savings Plan (VA529) submitted its Annual Report (the Report). The Report included, in draft form, VA529's Annual Report and Audited Financial Statements, and the Actuarial Valuation Report for the Virginia529 prePAID Program, both for the year ended June 30, 2016. These reports have been finalized and we have updated the submission in its entirety. Please accept the attached as the final submission of this Report.

#### REPORT CONTENTS

The Report contains the following:

- Transmittal Letter
- Attachment A Annual Report and Audited Financial Statements for the year ended June 30, 2016
- Attachment B Actuarial Valuation Report for the Virginia 529 prePAID Program for the year ended June 30, 2016
- Attachment C Asset Allocation and Performance of the Virginia 529 prePAID Program for the fiscal year ended June 30, 2016
- Attachment D Asset Allocation and Performance of the Virginia 529 in VEST Program for the fiscal year ended June 30, 2016
- Attachment E Investment Policies and Guidelines for the Virginia529 prePAID and inVEST Programs
- Attachment F Investment Policy and Guidelines for Virginia 529 ABLEnow
- Attachment G prePAID Sustainability Study

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#### **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 any 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 prePAID's contractual obligations, in the event of a funding shortfall.

VA529's college savings mission is to continue to be a national leader in 529 programs by providing superior, affordable, innovative, tax-advantaged college savings options to assist families and others in achieving their higher education goals, all as part of our statutory mandate to help make college more affordable and accessible. We accomplish our mission primarily through four college savings programs, Virginia529 prePAID<sup>SM</sup> (prePAID), Virginia529 inVEST<sup>SM</sup> (inVEST), CollegeAmerica® and CollegeWealth®. In addition, Virginia taxpayers who are participants in VA529 programs may receive up to a \$4,000 per year, per account deduction for state income tax purposes.

The Virginia529 prePAID Program is a defined benefit program, which offers contracts, at actuarially determined prices, that provide for 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 education 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; however, calculations of benefits and payouts differ, both from Virginia public colleges and universities and between in-state private and out-of-state institutions. prePAID has a limited enrollment period each year, and is open to beneficiaries in the ninth grade or younger if the beneficiary or participant is a Virginia resident. Since inception, over 122,382 accounts have been opened, with 65,101 contracts remaining active at year-end. The program had total assets invested from contributions, net earnings and other revenue of approximately \$2.4 billion as of June 30, 2016. VA529 is responsible for the management of the program, including the investment of the prePAID portfolio.

The Virginia529 inVEST Program is a defined contribution savings program which allows participants of all ages to save for qualified higher education expenses, including tuition and fees, to be used at any eligible educational institution, by making contributions into the investment portfolio(s) of their choice. As of June 30, 2016, participants could select from among 19 investment portfolios designed and administered by VA529. inVEST accounts are subject to investment risks, including the possible loss of principal. The inVEST program is open year round and has no age or residency restrictions. inVEST began operation in December 1999. As of June 30, 2016, 282,662 accounts had been opened since inception, with 216,283 accounts remaining active at year end. These accounts had a net asset value of approximately \$3.3 billion as of June 30, 2016.

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CollegeAmerica is a defined contribution savings program offered in partnership with the American Funds, one of the largest mutual fund companies in the country. VA529 is the program sponsor and the American Funds the program manager. CollegeAmerica is available only through financial advisors and offers 43 of the American Funds mutual funds as investment options. CollegeWealth is also a defined contribution savings program offered in partnership with participating banks, BB&T and Union Bank & Trust. CollegeWealth participants invest in FDIC-insured savings products. Funds invested in CollegeAmerica and CollegeWealth are held and managed by the American Funds and our banking partners, respectively. Thus, they are not included in the financial statements and are not highlighted in this Report.

In December 2014, Congress passed the federal Stephen Beck, Jr. Achieving a Better Life Experience (ABLE) Act, establishing a new Section 529A of the Internal Revenue Code which authorizes states to establish and maintain tax-exempt disability savings accounts that 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.

In March 2015, Governor McAuliffe signed the Virginia ABLE Act (Chapter 311 of the 2015 Virginia Acts of Assembly), passed by the General Assembly to authorize the creation of an ABLE disability savings program. Responsibility for the development and administration of such a program was placed with VA529, thereby expanding its statutory mission.

VA529 is currently developing two ABLE programs to meet its statutory mandate and serve the disability community. ABLEnow will be a direct-sold, defined contribution program designed on a health savings account model providing accounts with the ability to have both an interest-bearing checking account and low-cost investment options. VA529 is partnering with PNC Bank, N.A. to assist in the development and administration of the program. ABLEAmerica will be a broker-sold, defined contribution program administered by the American Funds and using American Funds mutual funds as the investment options, similar to the existing CollegeAmerica college savings program. VA529 expects to launch ABLEnow prior to the end of calendar 2016 and hopes to launch ABLEAmerica sometime in calendar 2017.

JLARC staff attended VA529 Board and Committee meetings and the Board's retreat during fiscal 2016. 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 prePAID asset allocation categories in fiscal 2016 and none are planned. Changes in the VA529 savings programs included the inVEST age-based portfolio evolution in January 2016 along the glide path to emphasize more income and preservation of capital as the portfolios proceed towards their final evolution. Also, on October 1, 2015, VA529 opened three actively-managed target risk portfolios as static investment options for the inVEST Program. These actively-managed portfolios are designed to complement the passively-managed index target risk funds currently offered and provide an alternative for those investors who prefer active management. With the addition of these portfolios, inVEST now offers nineteen portfolio options for new investors. During fiscal 2016, VA529 approved the inclusion of three new CollegeAmerica investment options as well. A complete description of those changes may be found in the VA529 Annual Report and Audited Financial Statements for the year ended June 30, 2016, which is 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 always available to JLARC staff on the secure Board site.

VA529 has assumed a long-term rate of return of 6.25 percent on the prePAID investments. As of June 30, 2016, the total return since inception was about 6.1 percent net of fees and reflected prePAID's 0.1% percent performance during fiscal 2016. The actuarial funded status of prePAID as of June 30, 2016 was 129%. A copy of the Actuarial Valuation Report for the Virginia529 prePAID Program for the year ended June 30, 2016 is included as **Attachment B**.

Attachments C and D hereto contain detailed performance information on the prePAID and inVEST Programs as of June 30, 2016.

#### (iii) Investment Policies and Programs

VA529's Investment Advisory Committee reviews the Investment Policies and Guidelines for the prePAID and inVEST Programs annually. **Attachment E and F** hereto contain the Investment Policies and Guidelines for the Virginia529 prePAID and inVEST Programs as well as the ABLEnow Program that were most recently updated in December 2016.

#### (iv) Other Information

In October 2016, VA529 completed its prePAID Program Sustainability Study that examined the long-term sustainability of prePAID in its current structure and considered

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alternate structures. The study analyzed all options fairly and objectively, with no preconceptions. We look forward to reviewing the study and results thereof with JLARC staff.

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. 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.

Respectfully submitted,

Mary G. Morris

Chief Executive Officer

#### Attachments

pc: Board of the Virginia College Savings Plan

#### **Attachment A**

## Annual Report and Audited Financial Statements for the year ended June 30, 2016



### Virginia529 Annual Report

For the period ended on June 30, 2016







VIRGINIA COLLEGE SAVINGS PLAN
9001 Arboretum Parkway, North Chesterfield, VA 23236

Mary G. Morris Chief Executive Officer (804) 371-0766

#### LETTER OF TRANSMITTAL

October 15, 2016

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, 2016, 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.

#### MISSION AND PROGRAMS

VA529's college savings mission is to continue to be a national leader in 529 programs by providing superior, affordable, innovative, tax-advantaged college savings options to assist families and others in achieving their higher education goals, all as part of our statutory mandate to help make college more affordable and accessible. We accomplish our mission primarily through four college savings programs, Virginia529 prePAID<sup>SM</sup> (prePAID), Virginia529 inVEST<sup>SM</sup> (inVEST), CollegeAmerica® and CollegeWealth®.

In December 2014, Congress passed the federal Stephen Beck, Jr. Achieving a Better Life Experience (ABLE) Act, establishing a new Section 529A of the Internal Revenue Code which authorizes states to establish and maintain tax-exempt disability savings accounts that 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.

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VA529 is currently developing two ABLE programs to meet its statutory mandate and serve the disability community. ABLEnow will be a direct-sold, defined contribution program designed on a health savings account model providing accounts with the ability to have both an interest-bearing checking account and low-cost investment options. VA529 is partnering with PNC Bank, N.A. to assist in the development and administration of the program. ABLEAmerica will be a broker-sold, defined contribution program administered by the American Funds and using American Funds mutual funds as the investment options, similar to the existing CollegeAmerica college savings program. VA529 expects to launch ABLEnow prior to the end of calendar 2016 and hopes to launch ABLEAmerica sometime in calendar 2017.

#### 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 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.

#### VIRGINIA529 prePAID ACTUARIAL VALUATION AND OUTLOOK

VA529's most recent actuarial valuation report for the Virginia529 prePAID program was prepared by Milliman, Inc. as of June 30, 2016 and compares the value of the current and projected assets of prePAID to the value of 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 prePAID's actuarial valuation report are the long-term rates of investment return and future tuition growth. The report indicated an improvement in prePAID's actuarially determined funded position from the position as of June

30, 2015 primarily due to lower than expected tuition increases and changes to the economic assumptions, offset by lower than expected investment returns. We are pleased to report that prePAID was 129 percent funded on an actuarial basis as of June 30, 2016.

The Plan continues to remain optimistic that its asset allocation and investment strategies will result in the prePAID portfolio meeting or exceeding performance expectations over the long term. The Plan has assumed a long-term rate of return of 6.25 percent on prePAID investments. As of June 30, 2016, the total return since inception was 6.1 percent, net of fees, and reflected the lower than expected 0.10 percent overall performance during fiscal 2016. Virginia529 has adopted a long-term target asset allocation strategy for prePAID as set forth in its Investment Policy and Guidelines. As of June 30, 2016, the prePAID portfolio was within about 0.5 percent of its target allocation in the four major categories.

Fiscal 2016 investment performance was influenced by significant volatility in global equity and fixed income markets. The year began with domestic equity markets having their worst quarter since 2011 with markets down about 7 percent through October 1, 2015. Commodity prices continued to fall and investors sought refuge in developed-market sovereign bonds. Equity and fixed income markets rebounded by calendar year-end only to plummet at the start of calendar 2016. By mid-January, oil was under \$35 per barrel and by mid-February, U.S. equity markets had fallen as reflected in the S&P 500 index dropping below 1,850. This volatility was primarily driven by market turmoil in China and diverging actions by global central banks. Domestic equity and fixed income markets rallied through June 30<sup>th</sup> ending the fiscal year just above where they started, as reflected in the S&P 500 index ending the year at 2,098, up 4.0 percent for the year. International markets on the other hand fared worse with the MSCI EAFE and MSCI emerging markets indexes down -9.7 and -11.7, respectively.

In June 2016, the majority of the citizens in the United Kingdom voted to leave the European Union (EU) and neither the EU nor the U.K. prime minister (along with most of his cabinet) expected or desired that outcome. Global markets sold off as a result but quickly rebounded after markets absorbed the news, recognizing that central banks would intervene if and as necessary and that the transition would take considerable time to implement.

The Federal Reserve (Fed) remained on the sidelines for most of fiscal 2016. The Fed continued to reinvest principal payments from its holdings of agency mortgage-backed and U.S. Treasury debt thereby retaining its sizeable holdings of long-term securities. In December 2015, after holding rates at near zero for seven years, the Fed finally raised the target federal funds rate by a quarter of a percentage point to ½ to ½ percent. Fed officials began calendar 2016 expecting to raise rates four times in quarter-point increments but delayed further increases in light of slow economic growth, uncertainty in developments overseas, and the soft and inconsistent U.S. labor market. In September 2016, despite Fed Chairwoman Janet Yellen signaling growing conviction among Fed officials as to increasing rates at the Fed's September meeting, the Fed decided to maintain their target federal funds rate at ¼ to ½ percent, leaving it unchanged since December 2015. The Fed stated that while the case for an increase in the

federal funds rate has strengthened, it cited little change in unemployment levels, soft business fixed investment and continued low inflation as the reasons for no movement.

Negative interest rate policies among central banks globally may be the norm over the short-to mid-term. Global central banks continue to increase money supply and suppress rates to spur growth and inflation. In fact, over the last three years, negative yielding developed-market sovereign bonds have gone from zero to more than one-third of all outstanding bonds. In August, the Bank of England cut its benchmark interest rate to the lowest level in its 322-year history and revived its bond-buying program to cushion the U.K. economy. Global investors continued to buy U.S. Treasuries and other developed-market sovereign debt as a safe haven. In early July, the yield on the ten-year U.S. Treasury bond set a new record yielding only 1.367 percent, and the yield on Japan's 20-year government bond fell below zero for the first time ever.

As we head into fiscal 2017, investors continue to move towards higher yielding corporate bonds and equities in search of yield. Through the summer of 2016, U.S. equity markets set record highs. On August 11<sup>th</sup>, U.S. stock indexes set records with the Dow Jones Industrial Average, the S&P 500 and the Nasdaq Composite all achieving milestones on the same day, the first time that has happened since December 31, 1999. By the end of September, oil prices had completed their sixth month of trading between \$40 and \$50 a barrel as inventories remained high.

Strong U.S. equity markets were the bright spot in light of continued slow economic growth. Despite strong consumer spending, the average annual rate of GDP growth continues to hover just above 2 percent since the end of the 2007-2008 recession making this the weakest pace of any expansion since 1949. On the jobs front the unemployment rate rose to 5.0 percent by the end of September and the labor-force participation rate, or share of the population working or looking for a job, remained low at 62.9 percent.

Worries continue to abound with regard to geopolitical turmoil throughout the world and particularly in the Middle East, economic slowdowns in China and the emerging markets, concerns with domestic and European banks, low interest rates failing to ignite inflation, uncertainties of the timing of additional Fed rate hikes, U.S. Government debt levels and growing deficit spending, and continued sluggish job creation, tepid wage growth and a lagging recovery. At the end of September, U.S. equity markets remain up from fiscal year-end and the yield on the ten-year U.S. Treasury had risen to over 1.6 percent. It is difficult to estimate how these and other factors may impact the performance of prePAID during the remainder of fiscal 2017.

The other significant factor in prePAID's ability to meet its 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. During the 2014-16 biennium ended June 30, 2016, Virginia's public higher education institutions experienced reductions in state support. Following the 2014 Session budget impasse, subsequent special sessions and the adoption of a revised budget in September 2014, E&G funding for

higher education was reduced by \$45 million in each year of the biennium or about 2.1 percent according to the State Council of Higher Education for Virginia (SCHEV). During its 2015 Session, the General Assembly provided additional general fund support, but it was not sufficient to restore all of the funding from the prior budget reduction. As a result, full time undergraduate tuition and all mandatory fees at public higher education institutions in Virginia increased by about 6.0 percent for the 2014-15 and 2015-16 academic years.

According to SCHEV, during its 2016 Session, the Governor and General Assembly provided about \$223 million in additional general funds for operating and financial aid to higher education during the 2016-18 biennium. In addition, the Governor and General Assembly provided about \$48 million in additional support for undergraduate need-based student aid. As a result, the average tuition and mandatory E&G fees for instruction-related activities for in-state undergraduate students increased by about 4.6 percent for the 2016-17 academic year. This represents some of the lowest increases in the last decade. While general fund support for Virginia public higher education institutions will increase in fiscal 2017, it remains about 12 percent lower than general fund appropriations in fiscal 2008 after adjusting for inflation.

Also according to SCHEV, as a result of years of consecutive general fund budget reductions, the State's contribution to the cost of higher education is estimated to be 47 percent, which means that on average, in-state undergraduate students will pay more than half of the cost of their education in fiscal 2017. The Commonwealth's contribution is 20 percentage points lower than the target of 67 percent identified in its official tuition policy.

In the summer of 2016, the Governor announced that general fund revenues rose during fiscal 2016, but fell short of the official revenue forecast and resulted in a \$1.2 billion revenue shortfall over the 2016-18 biennium. It remains to be seen whether the increases in general fund higher education support will remain through the balance of the biennium.

Virginia is considered to be one of the most vulnerable states to federal spending reductions because of its dependence on defense spending and the large number of federal employees who live and work in Virginia. According to a JLARC study, between 18 and 30 percent of Virginia's general fund revenue is estimated to result from federal spending. So, while Virginia has benefitted from its relationship with the federal government, pressures on future federal spending may result in reduced spending in Virginia. The ultimate impact and amount of continued federal spending reductions have yet to be determined.

In assessing prePAID's financial condition and in pricing prePAID contracts, VA529 has projected that tuition and fee increases at Virginia's public higher education institutions will increase annually by approximately 5.0 percent for the 2017-2018 and 2018-2019 academic years, and 6.5 percent thereafter for four-year and two-year institutions. Additional 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 or changes in tuition models that result in tuition increases

above VA529's projections would have an immediate, detrimental impact on VA529's outstanding long-term prePAID 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 public higher education institutions that impact prePAID may have an adverse impact on program sustainability.

#### **2016 PROGRAM HIGHLIGHTS**

#### Account Growth and Transaction Volume

During fiscal 2016, the Plan continued to experience positive growth in accounts as shown in the table below. CollegeWealth's 17.5 percent growth rate demonstrates the continued growth of the program with BB&T and Union Bank & Trust. This figure continues to normalize as the program's account base increases following its 2009 re-launch. The inVEST Program's 13.7 percent growth rate depicts continued strong growth and corresponds to an additional 26,954 accounts opened during the fiscal year.

Fiscal 2016 Growth in Accounts		
prePAID	5.5%	
inVEST	13.7%	
CollegeAmerica	2.7%	
CollegeWealth	17.5%	

Gross accounts opened during fiscal year, except for CollegeAmerica (net)

Transaction volume also continued to increase as participants utilized their college savings accounts. During fiscal 2016, the Plan processed 39,415 inVEST distribution requests and 22,908 prePAID payments to institutions, representing a 24 percent increase and 12 percent decrease over the prior fiscal year, respectively. The reduction in prePAID payments to institutions reflects a change in how benefits for students attending school outside of Virginia were distributed rather than a reduction in the number of contracts for which benefits were distributed. Beginning at the end of fiscal 2015, benefits for those students attending school outside of Virginia were distributed by transferring benefits to an inVEST account in advance of when the benefits would have been paid to the college under the prior methodology. This change increased the number of inVEST distributions and reduced the number of prePAID payments to institutions by about 3,900, respectively. Ignoring the change in methodology, the number of prePAID payment transactions were flat at about 26,860.

#### • Virginia529 inVEST Program and CollegeAmerica Investment Changes

In fiscal 2016, the inVEST Program's 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. The next scheduled major step in the glide path evolution will occur on January 1, 2017 when inVEST is scheduled to add its next new age-based portfolio, and the Southside portfolio will transition from 100 percent fixed income (82.5 percent stable value, 17.5 percent other fixed income) to 100 percent stable value. The final evolution for all portfolios is to 100 percent stable value. Stable value comprised over 23 percent of the inVEST program's assets under management as of June 30, 2016. The age-based evolving portfolios continue to be the most popular of the diversified inVEST program investment options.

During fiscal year 2015 the Board approved an addition of three new actively-managed, static, target risk portfolios. These portfolios were designed to mirror the allocations of the current 80 percent equity/20 percent fixed income, 50 percent equity/50 percent fixed income, and 25 percent equity/75 percent fixed income age-based portfolios, respectively. The asset allocations of these portfolios will not evolve. These actively-managed portfolios are designed to complement the passively-managed index target risk funds currently offered and provide an alternative for those investors who prefer active management. The new portfolios were opened as of October 1, 2015. With the addition of these portfolios, inVEST now offers nineteen portfolio options for new investors.

In October 2015, the inVEST and CollegeAmerica Programs received Silver ratings from Morningstar. 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, 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 63 of the largest 529 plans in 2015. Morningstar's ratings from highest to lowest are Gold, Silver, Bronze, Neutral and Negative. inVEST and CollegeAmerica were two of seven plans that received Silver ratings. Four plans also received a Gold rating, which makes inVEST and CollegeAmerica two of eleven plans that received one of the top two ratings.

During fiscal year 2016, the Board approved the addition of three new CollegeAmerica investment options, the American Funds Corporate Bond Fund, the American Funds Strategic Bond Fund and the American Funds Emerging Markets Bond Fund. These funds were approved in October 2015, December 2015 and February 2016, respectively. The Strategic Bond Fund was made available to investors during fiscal 2016 and ended the fiscal year with approximately \$2.5 million in assets. The additional two funds approved during fiscal 2016 became available to investors after the fiscal year end. As of June 30<sup>th</sup>, the CollegeAmerica program offered 41 American Funds mutual funds.

In June 2016, the Board approved reducing VA529's administrative fees for both inVEST and College America, effective July 1, 2016. inVEST's administrative fee was reduced from 15 basis points (.15 percent) to 10 basis points (.10 percent) on assets under management; a 33 percent reduction. Prior to the reduction, the CollegeAmerica administrative fee was 10 basis points (.10 percent) of the average daily net asset value of the underlying funds up to \$30 billion; 7 basis points (.07 percent) for values in excess of \$30 billion up to \$50 billion; 6 basis points (.06 percent) for values in excess of \$50 billion up to \$70 billion; and 5 basis points (.05 percent) on values in excess of \$70 billion. The fee was reduced to 10 basis points (.10 percent) of the average daily net asset value of the underlying funds up to \$20 billion; 5 basis points (.05 percent) for values in excess of \$20 billion up to \$100 billion and 3 basis points (.03 percent) for values in excess of \$100 billion. The effective rate for CollegeAmerica, based on assets then under management, went from .88 percent to .70 percent or a 20 percent reduction. The inVEST and CollegeAmerica fees are calculated and accrued daily and paid to VA529 on a quarterly basis.

VA529 reduced fees to continue to offer low-cost programs in response to ongoing fee reductions in both the mutual fund and the 529 industries. The reduced fees will lower the cost of saving in the two programs in concert with VA529's mission to make college more accessible and affordable. In addition, as a result of account and asset growth, fiscal restraint and reduction in operating expenses, the net operating revenues retained in the special nonreverting (enterprise) fund at year-end has grown in recent years. Although Virginia529 supports its statutory, mission-driven priorities such as financial education and scholarship initiatives (Reading Makes Cent\$, SOAR Virginia, Junior Achievement), it had not expended amounts sufficient to absorb the increase in revenues resulting from the success of CollegeAmerica and inVEST. The reductions will reduce the excess revenue.

#### Operational and System Improvements

During fiscal 2016 VA529 continued to make improvements to better serve our customers. While too numerous to list them all, we offer the following examples.

As reported in recent years, VA529 was impacted as a result of the Department of Accounts replacement of CARS with a new, more robust accounting system (Cardinal Project). VA529 successfully interfaced and converted to Cardinal in February 2016.

As a result of legislation passed during the 2013 Session, Virginia taxpayers were allowed to direct the Department of Taxation, beginning with tax year 2014, to deposit all or a portion of their Virginia state income tax refund into one or more Virginia529 accounts. This collaborative project between Tax and Virginia529 resulted in a new tax form and was successfully implemented under budget. The program has been well-received by our account owners. During fiscal 2016, 1,088 deposit transactions were processed representing over \$590,000 in tax refunds, an increase of 72 percent over the 631 deposit transactions representing over \$363,000 received in fiscal 2015.

VA529 continued to improve our customers' experience in using their savings program (inVEST and CollegeWealth) benefits. In April 2016, VA529 launched a new process by which savings program participants may request and distribute benefits via on-line instruction. This also allows our customers for the first time to request distributions via ACH rather than by check. This change improves access to funds, efficiency in completing the transaction and provides the convenience of transacting business online. Customers appreciated the convenience and speed as over two-thirds of inVEST and CollegeWealth distributions were processed online versus paper during the last two months of the fiscal year.

In order to effect the move to online distributions, VA529 implemented a customer identification program in fiscal years 2015 and 2016 to enhance customer verification and identification for online transactions. These changes were fully implemented in the summer of 2015 and improved both VA529's and our customer's security in regards to online transactions.

As noted above, VA529 also improved the distribution of prePAID program benefits for those students attending school outside of Virginia by transferring benefits to an inVEST account in advance of when the benefits would have been paid to the college under the prior methodology. This project was begun at the end of fiscal 2015 and provided account owners with the flexibility to pay the schools directly and to better manage their VA529 prePAID benefits.

Finally, VA529 prides itself on the transparency it provides customers through its financial reporting. Accordingly VA529 implemented Governmental Accounting Standards Board Statement No. 72 Fair Value Measurement and Application in its fiscal 2015 annual financial statements one year earlier than required. GASB 72 provided guidance for determining fair value measurements for applying fair value to investments and related disclosures for financial reporting purposes. VA529 was the first state agency to implement GASB 72.

#### • 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.

JLARC issued its second biennial status report on VA529 in July 2016 and noted that VA529's programs had grown and met long-term performance goals. The report noted that the prePAID program was 126 percent funded on an actuarial basis as of June 30, 2015, but that the fund's investments had underperformed their benchmark for several years. The report noted however, that the Investment Advisory Committee oversaw the investment strategies and that the Committee understood the reasons for the underperformance and attributed it to its asset allocation strategy, which Committee members felt would outperform over time. The report noted the continued growth and success of the savings programs and VA529's expanded mission with the responsibility for establishing and managing the ABLE programs. Finally, the report discussed VA529's budget and staffing changes and management thereof, the reductions in

program fees and recent legislative changes. The full report may be found on JLARC's website at <a href="http://jlarc.virginia.gov/vcsp.asp">http://jlarc.virginia.gov/vcsp.asp</a>. 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 be responsible stewards of the funds in our care. We express our sincere thanks and appreciation to our outstanding staff, our business partners and the guidance and dedication of our Board and Committee members.

Respectfully submitted,

Mary G. Morris

Chief Executive Officer

Gary Ometer, CPA, CG

Chief Financial Officer

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# Martha S. Mavredes, CPA Auditor of Public Accounts

#### Commonwealth of Virginia

#### Auditor of Public Accounts

P.O. Box 1295 Richmond, Virginia 23218

December 5, 2016

The Honorable Terence R. McAuliffe Governor of Virginia

The Honorable Robert D. Orrock, Sr. Chairman, Joint Legislative Audit
And Review Commission

Board Members Virginia College Savings Plan

#### INDEPENDENT AUDITOR'S REPORT

#### **Report on 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** (Plan) as of and for the year ended June 30, 2016, 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 <u>Government Auditing Standards</u>, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

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

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

#### Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the business-type activities and the remaining fund information of the Virginia College Savings Plan as of June 30, 2016, and the changes in its financial position and its cash flows for the year ended in accordance with accounting principles generally accepted in the United States of America.

#### **Emphasis of Matter**

#### Relationship to the Commonwealth of Virginia

As discussed in Note 1, the basic financial statements of the Plan are intended to present the financial position, the changes in financial position and cash flows of only that portion of the business-type activities, the major enterprise fund, and aggregate remaining fund information of the Commonwealth of Virginia that is attributable to the transactions of the Plan. They do not purport to, and do not, present fairly the Commonwealth of Virginia's overall financial position as of June 30, 2016, and the changes in its financial position and its cash flows, where applicable, for the year then ended in conformity with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

#### Change in Accounting Principle

As discussed in Note 1 to the financial statements, the Plan began reporting investments on a trade date basis rather than on a settlement date basis. Our opinion is not modified with respect to this matter.

#### **Required Supplementary Information**

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 7 through 22, the Schedule of VA529's Share of Net Pension Liability on page 77, Schedule of VA529 Contributions on page 77, and Notes to Required Supplementary Information on page 78, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of the financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### Supplementary and Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Plan's basic financial statements. The accompanying supplementary information, such as Appendix A, Appendix B, and Appendix C and other information such as the letter of transmittal and program information for CollegeAmerica and CollegeWealth, is presented for the purpose of additional analysis and is not a required part of the basic financial statements.

Appendix A, Appendix B, and Appendix C are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, Appendix A, Appendix B, and Appendix C are fairly stated, in all material respects, in relation to the basic financial statements taken as a whole.

The letter of transmittal and program information for CollegeAmerica and CollegeWealth has 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**

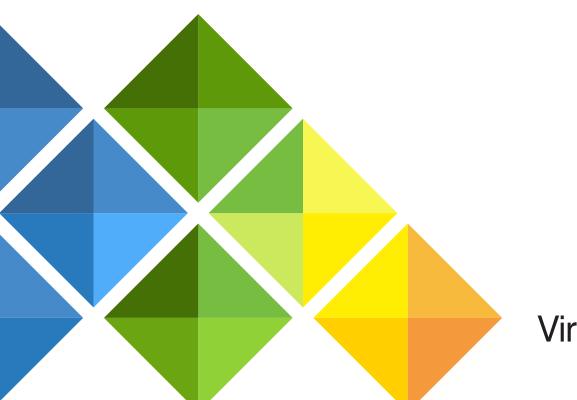
In accordance with <u>Government Auditing Standards</u>, we have also issued our report dated December 5, 2016, on our consideration of the Plan's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with <u>Government Auditing Standards</u> in considering the Plan's internal control over financial reporting and compliance.

Staci A. Henshaw
DEPUTY AUDITOR OF PUBLIC ACCOUNTS

AVC/alh



## Management's Discussion & Analysis





### 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, 2016. 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 four programs, Virginia529 prePAID<sup>SM</sup> (prePAID), Virginia529 inVEST<sup>SM</sup> (inVEST), CollegeAmerica® and CollegeWealth®. prePAID is considered a defined benefit program which offers contracts, at 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 prePAID. Key factors used in the actuarial analysis include anticipated tuition increases (both short and long-term) as well as anticipated long-term investment performance. inVEST is a defined contribution savings program, which allows participants to make contributions into their selected investment portfolio(s). inVEST accounts are subject to market investment risks, including the possible loss of principal.

CollegeAmerica and CollegeWealth are also defined contribution savings programs. CollegeAmerica, a broker-sold program, offers 41 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. CollegeWealth participants invest in FDIC-insured savings products offered through two participating banks, BB&T and Union Bank & Trust.

#### **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 prePAID activities and VA529's operating activities are accounted for in an enterprise fund (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 June 30th.

The Statement of Net Position presents information on all prePAID assets and liabilities, 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 prePAID'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

inVEST 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.

inVEST 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 inVEST assets and liabilities, with the difference between the two reported as total net position. The Statement of Changes in Fiduciary Net Position presents the revenues earned and expenses incurred during the year.

#### **Other Information**

CollegeAmerica and CollegeWealth are both defined contribution savings programs and are presented as Other Information.

#### 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.

#### **Fiscal 2016 Financial Highlights**

VA529 collects, holds, invests and distributes monies held in trust for program participants. VA529 invests its funds pursuant to statute and Investment Policies and Guidelines under the direction of its Board and Investment Advisory Committee in a mix of equity, fixed income and alternative investments. During the fiscal year ended June 30, 2016, domestic equity markets continued to perform moderately well, but with continued volatility resulting from depressed energy and commodity prices, concerns about slow global growth despite unprecedented central bank intervention, and continued uncertainty as to whether the Federal Reserve would continue tightening rates, having raised its target rate in December 2015 by .25 percent to 0.25-0.50 percent after seven years at near zero. International equity markets exhibited similar volatility with emerging markets being negatively impacted by currency fluctuations and investors flight to developed securities markets following a number of global events. The United States domestic equity market, as measured by the Standard & Poor's 500 Index, ended the year up 4.0 percent from June 30, 2015 while international equity markets as measured by the MSCI EAFE Index were down -9.7 percent, with emerging markets as measured by the MSCI EM Index, down -11.7 percent for the year. The fixed income markets performed well during the year as interest rates fell steadily throughout the year as measured by the ten-year U.S. Treasury falling from a yield of 2.43 percent at the beginning of fiscal 2016 to a yield of 1.49 percent by June 30, 2016. The ten-year continued its slide into fiscal 2017 setting a record low yield of 1.37 percent in early July 2016. The Barclays Capital US Aggregate Bond Index returned 6.0 percent for the year ended June 30, 2016. Certain asset classes such as real estate investment trusts performed very well as demonstrated by the NCREIF NFI ODCE Index which returned 13.7 percent for the year ended March 31, 2016.

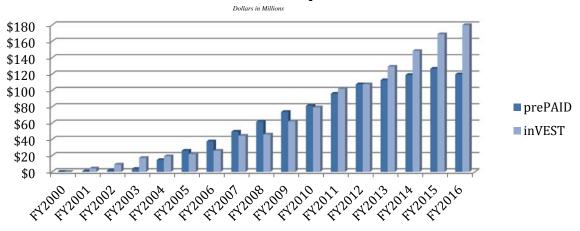
In aggregate, market movements had an overall net positive effect, albeit mixed and lower than the previous year, on fixed income and equity security prices in the prePAID, inVEST and CollegeAmerica portfolios for the fiscal year ended June 30, 2016.

#### **Other Highlights**

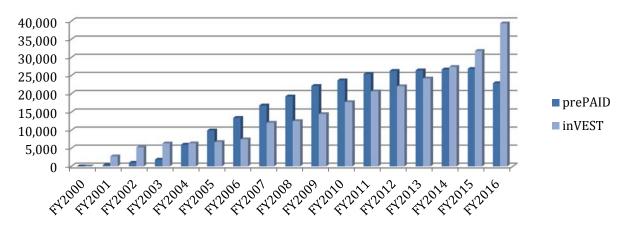
- The Enterprise Fund's total cash, cash equivalents, and investments held in trust for program participants decreased by \$10.4 million, or about -0.4 percent from fiscal year-end 2015.
- prePAID's actual return on investments for the fiscal year ended June 30, 2016 was 0.1 percent on a time-weighted and -.03 percent dollar-weighted basis reflecting the equity and fixed income market performance during the fiscal year.
- The Enterprise Fund's net position increased by \$43.3 million to an actuarially determined surplus of \$589.7 million from an actuarial surplus of \$546.4 million in the prior year, which was primarily due to lower than expected tuition increases and changes in the economic assumptions offset by lower than expected investment returns.
- prePAID's actuarially determined obligations for future payments decreased by \$81.2 million, or approximately -3.8 percent, which was primarily due 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. 3,561 new contracts were opened during prePAID's 2015 2016 enrollment period.
- inVEST's net position held in trust for program participants increased by \$256.8 million or about 8.4 percent due to growth in accounts and favorable market conditions.
- Both prePAID and inVEST applicants continued utilization of on-line applications with more than 97.9 and 94.3 percent of applications being filed on-line, respectively.
- In April 2016, VA529 launched on-line distributions for its inVEST and CollegeWealth savings program participants, improving access to funds, transaction efficiency and convenience. During the last two and one-half months of the fiscal year 3,668 on-line distribution requests were processed versus 1,788 paper requests.
- VA529 continued to experience positive growth in accounts, particularly in inVEST and CollegeWealth with 13.7 percent and 17.5 percent gross account growth, respectively. CollegeAmerica also experienced positive net account growth in 2016 at 2.7 percent. More information on CollegeAmerica and CollegeWealth is provided in Other Information.
- Distributions as measured by dollars and number of transactions continued to increase for both prePAID and inVEST as participants utilized their college savings accounts. Transactional activity for both prePAID and inVEST is depicted in the graphs below.

The two graphs below represent in VEST and prePAID distributions since fiscal year 2000.

#### **Amounts Distributed per Fiscal Year**

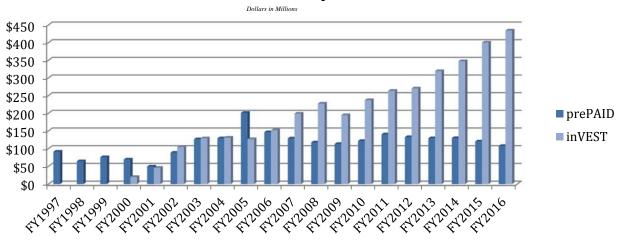


#### Number of Distributions on Behalf of Beneficiaries per Fiscal Year

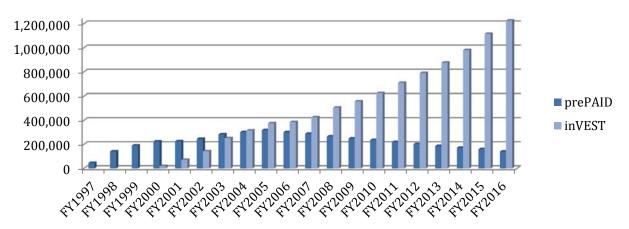


The two graphs below represent prePAID contract payments and inVEST contributions received since fiscal year 1997 – inVEST being introduced in fiscal 2000.

#### **Amounts Received per Fiscal Year**

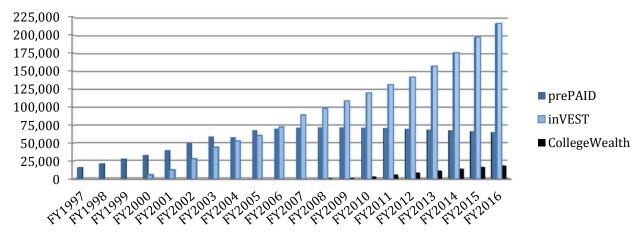


#### Number of Payments/Contributions Received per Fiscal Year



The graph below represents in VEST, CollegeWealth and prePAID accounts under management since fiscal year 1997 – in VEST being introduced in fiscal 2000. CollegeWealth was introduced in fiscal 2008.

#### **Growth in Accounts Under Management**



**Analysis of Enterprise Fund Financial Activities** 

The Enterprise Fund includes the activities of prePAID as well as VA529's general operating activities. The Enterprise Fund ended the year with net position of \$589.7 million.

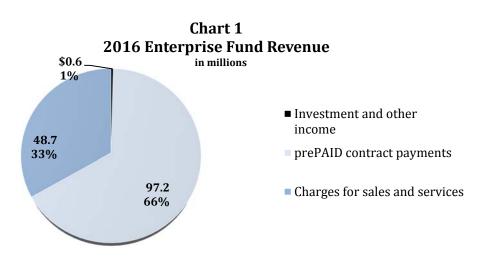
Table 1 is a summary comparison of the Enterprise Fund's Statement of Revenues, Expenses, and Changes in Net Position for fiscal year 2016 as compared to the prior year.

**Table 1 - Enterprise Fund - Changes in Net Position** (in millions)

YEARS ENDED JUNE 30,		2016		2015		CHANGE	
Operating revenues							
Charges for Sales and Services	\$	48.7	\$	48.6	\$	0.1	
Interest and Dividends		54.2		113.7		(59.5)	
Net increase in fair value of investments		(53.6)		(86.2)		32.6	
prePAID contract payments		97.2		111.7		(14.5)	
Other		-		-		-	
Net operating revenues		146.5		187.9		(41.4)	
Operating expense							
Tuition Benefits Expense		81.9		135.1		(53.2)	
Other operating expenses		20.5		19.5		1.0	
Net operating expenses		102.4		154.6		(52.2)	
Operating income (loss)		44.0		33.3		10.7	
Transfer to the Commonwealth		(0.4)		(0.3)		(0.1)	
Non Operating Interest Expense		(0.2)		(0.2)		(0.0)	
Change in net position		43.4		32.8		10.7	
Net position, July 1, 2015		546.3		513.6		32.7	
Net position, June 30, 2016	\$	589.7	\$	546.4	\$	43.3	

Amounts may not sum due to rounding

As stated above, capital markets performance was mixed during the fiscal year with international equity markets (particularly emerging and frontier markets) posting negative returns and U.S. domestic equity markets providing moderate gains consistent with recent years due to continued growth in consumer-led consumption and retail sales and the need for yield in a persistent low-rate environment driving investors to dividend-paying equities. The prePAID portfolio's performance reflected this with a rate of return for fiscal 2016 of about .1 percent. For the fiscal year ended June 30, 2016, as a result of the investment performance and prePAID program payouts, there was a net decrease in the fair value of investments of approximately \$53.6 million, versus the decrease in the prior fiscal year of \$86.2 million. 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 on June 30th, or the last business day of the fiscal year. Investment income represents about 1 percent of enterprise fund revenue, as shown in Chart 1.



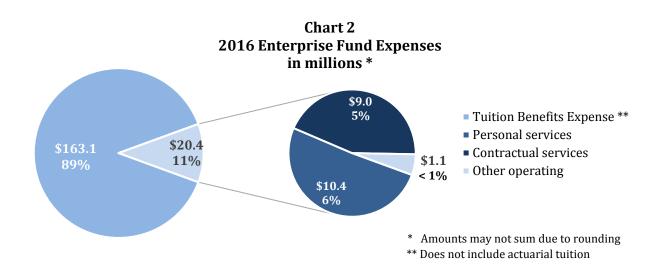
VA529 prePAID contract payment revenue includes actual and actuarially estimated contract payments, and represents approximately 66 percent of enterprise fund revenue. Actual contract payments received from participants decreased by \$12.6 million over prior year receipts. In addition, actuarially determined prePAID contract payment revenue decreased by \$1.9 million. Receipts for charges for sales and services remained steady during fiscal year 2016, totaling \$48.7 million.

Table 1 also reflects tuition benefits expense, which is comprised of two components; actuarially determined and actual tuition benefits expenses. The net change in tuition benefits expense from fiscal year 2015 is -\$53.1 million. 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 \$57.5 million.

Actual tuition benefits expense represents actual distributions made during the fiscal year. This amount increased over the prior year by \$4.4 million, or 2.8 percent. The increase in actual distributions is attributable to increases in tuition and mandatory fees at the higher education institutions.

Table 2 demonstrates the numbers of students served and the amounts paid from prePAID directly to Virginia public universities and community colleges during fiscal year 2016. Virginia's universities and colleges received approximately \$111 million in prePAID tuition and mandatory fee payments for 11,089 students in fiscal year 2016.

As shown in Chart 2, tuition benefit payments represent 89 percent of actual expenses of the Enterprise Fund. Of the \$20.4 million expended for administration and operations expenses, 95 percent were for personal and contractual services.



**Table 2 prePAID Payments to Virginia Public Universities and Community Colleges Fiscal Year 2016** 

Public Universities	Students with prePAID Contracts	prePAID Payments to Universities
Virginia Tech	1,872	\$22,152,576
University of Virginia	1,522	20,200,562
Virginia Commonwealth University	1,261	13,367,234
James Madison University	1,118	10,610,535
College of William & Mary	653	10,576,802
George Mason University	908	8,703,544
Christopher Newport University	467	5,571,948
Longwood University	388	3,980,740
Radford University	423	3,624,549
Old Dominion University	473	3,408,120
University of Mary Washington	326	3,294,203
Virginia Military Institute	67	1,038,676
University of Virginia's College at Wise	36	309,468
Norfolk State University	12	88,818
Virginia State University	14	81,866
Total Universities	9,540	\$107,009,641

Students with					
	prePAID	prePAID Payments to			
Public Community Colleges*	Contracts	Community Colleges			
Northern Virginia Community College	600	\$1,696,997			
Tidewater Community College	151	420,916			
J Sargeant Reynolds Community College	172	401,415			
John Tyler Community College	137	315,842			
Germanna Community College	96	265,318			
Thomas Nelson Community College	63	169,739			
Blue Ridge Community College	41	142,431			
Piedmont Virginia Community College	45	129,905			
Richard Bland College	25	121,588			
Virginia Western Community College	46	111,032			
Lord Fairfax Community College	41	96,858			
New River Community College	35	84,274			
Central Virginia Community College	16	34,974			
Rappahannock Community College	17	33,456			
Danville Community College	12	28,509			
Wytheville Community College	9	25,673			
Dabney S Lancaster Community College	6	25,021			
Southside Virginia Community College	11	21,408			
Paul D Camp Community College	9	20,685			
Patrick Henry Community College	5	14,516			
Southwest Virginia Community College	4	12,750			
Eastern Shore Community College	3	10,255			
Mountain Empire Community College	3	5,464			
Virginia Highlands Community College	2	3,738			
Total Community Colleges*	1,549	\$4,192,763			

<sup>\*</sup>Includes Richard Bland College; Virginia's only 2-year junior college.

Table 3 provides a comparison of administration and operations expenses between fiscal years 2016 and 2015.

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

YEARS ENDED JUNE 30,	2016	2015	CHANGE
Personal services	\$9,414	\$ 8,936	\$ 478
Actuarial pension expense	\$1,007	682	325
Fiscal and contractual services	8,986	8,801	185
Supplies and materials	34	43	(9)
Depreciation	535	527	8
Rent, insurance, and other related charges	194	144	50
Expendable equipment	266	351	(85)
Other	61	29	32
Administration and Operations Expenses	\$20,497	\$ 19,514	\$ 983

Actuarial pension expense was newly reported in fiscal 2015 pursuant to GASB Statement No. 68. This figure represents the portion of VA529's change in net pension liability during the measurement period attributable to expenses. The remainder of the change in net pension liability is reflected as deferred inflows and outflows. The actual pension expense incurred during fiscal 2016 is included as a deferred outflow as well as a reduction in personal services. See Note 10 – Retirement and Pension Plan for additional information on accounting for pension expenses. Increase in personal services expense an increase of \$478 thousand, or 5.3 percent, over the prior year's amount. That increase is attributable to a newly added position late fiscal 2015 as well as VA529 employees receiving salary increases and incentive performance bonuses as provided in the Plan's Compensation Plan approved by the General Assembly.

Increases in agency service charges are reflected in the change in Rent, insurance and other related charges. The increase is result of increases in charges for the use of Commonwealth's Performance Budgeting System as well as new service charges for the Commonwealth's accounting system, Cardinal, implemented in February 2016. The decrease in other expenses primarily represents a decrease in promotional and scholarship award payments from fiscal 2015.

Table 4 - Enterprise Fund Summary of Net Position\*

As of JUNE 30,	2016	2015	CHANGE
Assets and deferred outflows:			
Current assets	\$ 140.3	\$ 152.9	\$ (12.6)
Investments	2,355.3	2,359.5	(4.2)
Other noncurrent assets	160.7	168.6	(7.9)
Total assets	2,656.3	2,681.0	(24.7)
Total deferred outflows	1.8	1.1	0.7
Assets and deferred outflows	2,658.1	2,682.1	(24.0)
Liabilities and deferred inflows:			
Current liabilities	266.8	242.0	24.8
Noncurrent liabilities	1,800.8	1,892.1	(91.3)
Total liabilities	2,067.6	2,134.1	(66.5)
Total deferred inflows	8.0	1.6	(0.8)
Liablities and deferred inflows	2,068.4	2,135.7	(67.3)
Net Position			
Net investment in capital assets	3.3	3.4	(0.1)
Unrestricted	586.4	542.9	43.5
Change in net position	\$ 589.7	\$ 546.3	\$ 43.4

<sup>\*</sup>Amounts may not sum due to rounding

#### **Assets**

Total current assets decreased by approximately 8.2 percent, or \$12.6 million, from the previous year. Cash and cash equivalents decreased from the prior year, primarily attributable to an election by prePAID program investment managers utilizing separate account vehicles to hold less cash in their portfolios subject to their applicable constraints specified in investment guidelines. prePAID contract payments receivable, an actuarially determined amount, decreased by 6.2 percent, also contributing to the overall decrease in current assets.

Long-term investments remained steady, decreasing by less than 1 percent. Other noncurrent assets decreased by \$7.9 million, due primarily to the decrease in the noncurrent portion of the tuition contributions receivable. This represents the decrease in the actuarially determined amount expected to be collected from contract holders of record in future years.

#### **Liabilities**

Total liabilities decreased by \$66.5 million. While current liabilities increased by \$24.8 million, total tuition benefits payable, reflected in both current and noncurrent liabilities above, decreased by \$81.2 million, or approximately 3.84 percent. The total decrease represents 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 prePAID. 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 2016, prePAID's actuarial position, as calculated by VA529's actuary and reported in the 2016 Actuarial Valuation Report, improved from an actuarial surplus of \$546.4 million to a surplus of \$589.7 million. This improvement is mostly attributable to lower than expected tuition increases and changes in the economic assumptions offset by lower than expected investment returns. 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, 2016 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, 2016. The final report is expected to be completed no later than mid-December 2016. 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 2016 Actuarial Valuation Report may be obtained from VA529.

Table 5 - prePAID
Statement of Changes in Actuarial Reserve (dollars in millions)

Actuarial reserve at June 30, 2015	\$ 546.4
Interest on the reserve at 6.25%	34.2
Investment gain/(loss)	(152.3)
Tuition gain/(loss)	21.0
Lower than expected actual account balances	6.1
Sales of new contracts	12.0
Administrative fee revenue from VA529 programs	34.9
Change in tuition growth assumptions	30.8
Change in reasonable rate and other assumptions	37.0
Other experience gains	19.6
Actuarial Reserve as of June 30, 2016	\$ 589.7

VA529 prePAID's overall funded status, as calculated by the actuary, as of June 30, 2016 was 129 percent. Chart 3 provides prePAID's funded status since 1997.

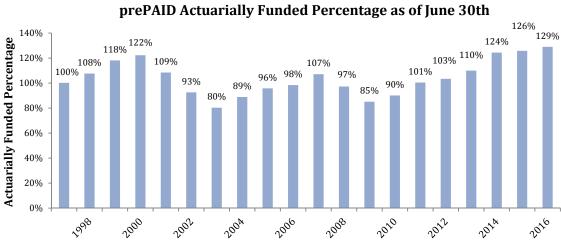


Chart 3
prePAID Actuarially Funded Percentage as of June 30th

Table 6 represents the condensed Statement of Cash Flows for the Enterprise Fund for the fiscal years ended June 30, 2016 and 2015. VA529's year-end cash balance in the Enterprise Fund decreased by \$6.1 million. The increase in cash used by Operating activities is the result of a decrease in tuition contract payments received and an increase in distribution payments.

Table 6 - Enterprise Fund
Statement of Cash Flows (dollars in millions)

As of June 30,	2016	2015
Cash provided (used) by:		-
Operating activities	(\$24.1)	(\$12.1)
Noncapital financing activity	(\$0.4)	(\$0.3)
Capital and related financing activities	(\$0.7)	(\$0.7)
Investing activities	\$19.0	\$35.8
Net increase (decrease) in cash	(\$6.2)	\$22.7
Cash – beginning of year	\$83.3	\$60.6
Cash – end of year	\$77.2	\$83.3

In fiscal 2016, the Board revised its Investment Policies and Guidelines for prePAID and inVEST. The Guidelines for both prePAID and inVEST were updated to incorporate VA529's rebalancing policy that was adopted since the Guidelines were last updated in fiscal 2015. A new appendix was added to the prePAID Guidelines to reflect the total prePAID fund benchmark composition. The inVEST Guidelines were also modified to include the three new actively-managed, target risk, static portfolios, along with other changes such as adding the benchmarks for the new portfolios.

In fiscal 2015, the Board approved the addition of three actively-managed, target-risk portfolios to inVEST's static investment options. The three funds were opened as of October 1, 2015. As of June 30, 2016, the funds had over 1,800 accounts and \$8.3 million in assets under management.

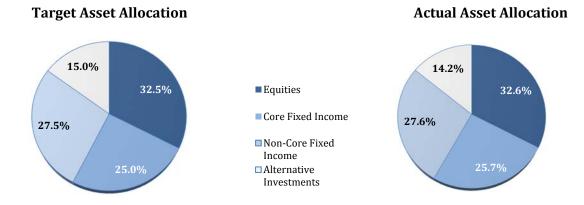
In fiscal 2016, the Investment Advisory Committee selected Dimensional Fund Advisors as an additional emerging markets equity manager for both prePAID and inVEST. Dimensional's allocation

was \$50 million in each inVEST and prePAID, and reduced Aberdeen Asset Management's allocation accordingly. The Committee also terminated Aurora Investment Management and Harmonic Capital Partners, and agreed to engage Blackstone Alternative Asset Management as prePAID's hedge fund of funds manager. Blackstone received its initial funding in July 2016 from partial liquidation of Aurora's and Harmonic's funds. Liquidation of Aurora's and Harmonic's funds will continue into fiscal 2017 and the proceeds from their respective liquidations are expected to be used to fund Blackstone's allocation.

In May 2016, Brookfield Investment Management, prePAID's mortgage-backed securities manager, announced that Schroder Investment Management would acquire Brookfield's securitized products investment management business and team. The transaction was completed in September 2016.

Also during fiscal 2016, the Investment Advisory Committee approved additional allocations to Aether Investment Partners, Adams Street Partners and Private Advisors, private equity fund of funds managers for prePAID. A complete list of prePAID managers as of June 30, 2016 can be found in Appendix B.

Chart 4 prePAID Asset Allocation as of June 30, 2016



### Analysis of Fiduciary Fund (inVEST) Financial Activities

Table 7 reflects the changes in inVEST's net position for fiscal 2016. 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 inVEST participants increased from the previous year by approximately \$33.4 million and there were nearly 27,000 new inVEST accounts opened during the fiscal year. As anticipated, overall disbursements to inVEST beneficiaries and institutions increased over the prior year by approximately 20.5 percent as more participants withdrew funds for higher education expenses.

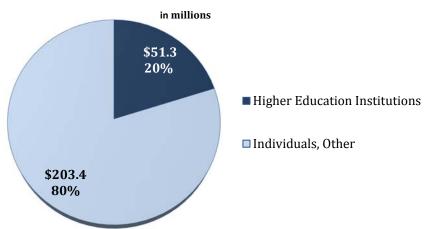
**Table 7 – inVEST Change in Fiduciary Net Position** (dollars in millions)

Fiscal year ended June 30	2016	2015	Change
Additions	\$ 484.8	\$ 455.2	\$ 29.6
Deductions	228.2	193.4	34.8
Net Increase (decrease)	256.6	261.8	(5.2)
Net position held in trust, beginning	3,072.5	2,810.7	261.8
Net position held in trust, ending	\$ 3,329.1	\$ 3,072.5	\$ 256.6

A majority of the \$203.4 million inVEST distributions during the fiscal year were paid directly to individuals. Under inVEST, participants have the ability to direct VA529 to pay the institution, or to pay higher education expenses directly and subsequently reimburse themselves from their inVEST account. Chart 5 below contains a breakdown of these distributions.

In October 2015, the inVEST Program received a Silver 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 63 of the largest 529 plans in 2015. Morningstar's ratings from highest to lowest are Gold, Silver, Bronze, Neutral and Negative. inVEST was one of seven plans to receive a Silver rating. Four plans also received a Gold rating, which makes inVEST one of eleven plans that received one of the top two ratings.

Chart 5 2016 inVEST Distributions



In fiscal 2016, the inVEST 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. The next scheduled major step in the glide path evolution will occur on January 1, 2017 when inVEST is scheduled to add its next new age-based portfolio, and the Southside portfolio will transition from 100 percent fixed income (82.5 percent stable value, 17.5 percent other fixed income) to 100 percent stable value.

During the prior fiscal year the Board approved an addition of three new actively-managed, static, target risk portfolios to complement the current passively-managed, target risk portfolios. These portfolios were designed to mirror the allocations of the current 80 percent equity/20 percent fixed income, 50 percent equity/50 percent fixed income, and 25 percent equity/75 percent fixed income age-based portfolios, respectively. The asset allocations of these portfolios will not evolve. These portfolios were opened in October 2015.

#### CollegeAmerica and CollegeWealth

Assets under management in CollegeAmerica increased during the fiscal year by approximately 2 percent from \$49.8 billion to \$50.8 billion. There were an additional 57,346 unique CollegeAmerica accounts at fiscal year-end compared to the prior fiscal year-end.

The Board approved the addition of three new CollegeAmerica investment options during the fiscal year, the American Funds Corporate Bond Fund, the American Funds Strategic Bond Fund and the American Funds Emerging Markets Bond Fund. These funds were approved in October 2015, December 2015 and February 2016, respectively. The Strategic Bond Fund was made available to investors during fiscal 2016 and ended the fiscal year with approximately \$2.5 million in assets. The additional two funds approved during fiscal 2016 became available to investors after the fiscal year end.

Assets under management in CollegeWealth increased by 6 percent in fiscal year 2016 to more than \$116 million at year end. The assets represented amounts held in savings instruments at the two participating banks (BB&T and Union Bank & Trust) and were thus not subject to fair market value adjustments at year-end.

CollegeAmerica and CollegeWealth 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 prePAID portfolio meeting or exceeding performance expectations over the long term. VA529 has assumed a long-term rate of return of 6.25 percent on the prePAID investments. As of June 30, 2016, the total return since inception was about 6.1 percent net of fees and reflected prePAID's .1 percent performance during fiscal 2016. Global and domestic equity and fixed income markets experienced little volatility from June 30, 2016 into fiscal 2017 having a positive impact on prePAID portfolio performance. Portfolio performance through the balance of fiscal 2017 will depend on many factors.

In assessing prePAID's financial condition and in pricing prePAID contracts, VA529 has projected that tuition and fee increases at Virginia's public higher education institutions will increase annually by approximately 5 percent for the 2017-2018 and 2018-2019 academic years, and 6.5 percent thereafter for four-year universities as well as community colleges and two-year institutions. This long-term tuition and fee increase projection was reduced from a flat 6.5 percent for the June 30, 2016 prePAID valuation and 2016-2017 enrollment period pricing.

Changes in public education funding or changes in tuition models that result in tuition increases above VA529's projections would have an immediate, detrimental impact on VA529's outstanding long-term prePAID 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 public higher education institutions and recently proposed legislation impacting tuition and fee models that impact prePAID may have an adverse impact on program sustainability.

In light of these and other issues, in fiscal 2016 VA529 undertook a sustainability study to consider all options for prePAID including maintaining the current program unchanged; maintaining the current program with minimal modifications (single-price model; single-tier pricing); closing prePAID 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 Virginia529 and Virginia public higher education institutions. The sustainability study will be completed in fiscal 2017 and presented to the Board for consideration.

The performance of participants' in VEST and College America portfolios will depend on many of the same investment factors as those impacting prePAID. In in VEST, College America, and College Wealth, the participants rather than VA529 bear the risk of portfolio declines as a result of the market or other factors. As a result, no further information as to economic factors and outlook is provided.



## Financial Statements



roi the real Ended Julie 30, 2016	Administration and Operations	prePAID	Total Enterprise
Assets and Deferred Outflows of Resources	una operations	prorrie	
Current assets:			
Cash and cash equivalents (Note 1E and 2)	\$ 1,796,425	\$ 75,413,450	\$ 77,209,875
Interest receivable	-	4,337,784	4,337,784
prePAID contract payments receivable (Note 1G and 9)	-	46,753,636	46,753,636
Prepaid and other assets	147,190	-	147,190
Accounts receivable (Note 1H)	11,211,181	641,734	11,852,915
Total current assets	13,154,796	127,146,604	140,301,400
Noncurrent assets:			
Investments (Note 1E, 2, 3, and 4)	-	2,355,261,206	2,355,261,206
prePAID contract payments receivable (Note 1G and 9)	-	152,005,142	152,005,142
Depreciable capital assets, net (Note 1K and 8)	8,701,688		8,701,688
Total noncurrent assets	8,701,688	2,507,266,348	2,515,968,035
Total assets	21,856,484	2,634,412,952	2,656,269,436
Deferred Outflows of Resources:			
Pension contributions made after measurement date (Note 10)	964,499	-	964,499
Pension Related (Note 10)	869,000		869,000
Total deferred outflows	1,833,499		1,833,499
Total Assets and Deferred Outflows of Resources	23,689,983	2,634,412,952	2,658,102,935
Liabilties and Deferred Inflows of Resources			
Current liabilities:	006.404		026.404
Accounts payable	926,484	- 12 005 257	926,484
Pending trades payable Program distributions payable	- -	13,805,357 25,759	13,805,357 25,759
Due to program participants (Note 1L)	597,245	157,083	754,328
Obligations under securities lending	18,950	-	18,950
Tuition benefits payable (Note 7 and 9)	-	250,472,458	250,472,458
Compensated absences (Note 1M and 7)	415,247		415,247
Obligations under capital lease (Note 7)	334,376	-	334,376
Total current liabilities	2,292,301	264,460,657	266,752,958
Noncurrent liabilities:			
Tuition benefits payable (Note 7 and 9)	-	1,785,136,320	1,785,136,320
Compensated absences (Note 1M and 7)	181,517	=	181,517
Obligations under capital lease (Note 7)	5,024,654	-	5,024,654
Net pension liability (Note 10) Total noncurrent liabilities	10,540,000	1 705 126 220	10,540,000 1,800,882,490
Total liabilities  Total liabilities	15,746,170	1,785,136,320	
	18,038,472	2,049,596,977	2,067,635,448
Deferred inflows of resources: Pension Related (Note 10)	758,000		758,000
Total deferred inflows	758,000		758,000
Total Liabilities and Deferred Inflows of Resources	18,796,472	2,049,596,977	2,068,393,448
NET POSITION	10,770,772	4,017,070,717	2,000,373,440
Net investment in capital assets	3,342,658	-	3,342,658
Unrestricted	1,550,853	584,815,975	586,366,829
Total net position	\$ 4,893,512	\$ 584,815,975	\$ 589,709,487
The notes to financial statements are an integral part of this statement	÷ 1,070,012	<del>7</del> 001,010,770	7 555,765,107
THE BOLOW TO FINANCIAL CLATEMENTS ARE AN INTEGRAL NART OF THIS STATEMENT			

VIRGINIA529
STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION
ENTERPRISE FUND
For the Year Ended June 30, 2016

	lministration d Operations	prePAID	Total Enterprise
Operating revenues: Charges for sales and services (Note 1D) Interest, dividends, rents, and other investment income Net increase in fair value of investments prePAID contract payments (Note 1G) Actuarial prePAID contract payments (Note 9) Other	\$ 48,700,009 25,047 - - - - 6,043	\$ - 54,195,074 (53,628,154) 107,665,254 (10,510,047)	\$ 48,700,009 54,220,120 (53,628,154) 107,665,254 (10,510,047) 6,043
Total operating revenues	 48,731,098	97,722,128	146,453,225
Operating expenses:			
Personal services (Note 10)	9,414,113	-	9,414,113
Actuarial pension expense (Note 10)	1,007,000	-	1,007,000
Fiscal and Contractual services	8,986,244	-	8,986,244
Supplies and materials	33,702	-	33,702
Depreciation (Note 8)	534,740	-	534,740
Rent, insurance, and other related charges	193,703	-	193,703
Tuition benefits expense	-	163,117,493	163,117,493
Actuarial tuition benefits expense (Note 9)	-	(81,160,047)	(81,160,047)
Expendable equipment	266,104	-	266,104
Other	 61,416		61,416
Total operating expenses	20,497,021	81,957,446	102,454,467
Operating gain/loss	28,234,077	15,764,682	43,998,759
Non-operating interest expense	211,703	-	211,703
Transfers:			
Transfers to the General Fund of the Commonwealth	415,045	-	415,045
Interfund transfer in (out) (Note 1)	 (28,429,199)	28,429,199	
Change in net position	(821,871)	44,193,882	43,372,011
Net position - July 1, 2015	 5,715,382	540,622,094	546,337,476
Net position - June 30, 2016	\$ 4,893,512	\$ 584,815,975	\$ 589,709,487

ENTERI RISE FUND
For the Fiscal Year Ended June 30, 2016
Cash flows from operating activities:
Receipts for sales and services
Contributions Received

Receipts for sales and services Contributions Received Internal Activity - Payments to Other Funds Payments to Suppliers for Goods & Services Payments to Employees Other Operating Revenue Payments for Contractual Services Distributions Other Operating Expenses	\$ 49,008,581 110,694,886 (330,520) (481,801) (10,342,480) 6,043 (9,001,429) (163,549,986) (61,416)
Net cash provided by (used for) operating activities	\$ (24,058,122)
Cash flows from noncapital financing activities: Transfer to the General Fund of the Commonwealth  Net cash provided by (used for) noncapital financing activities	\$ (415,045) (415,045)
Cash flows from capital and related financing activities: Acquisition of fixed assets Payment of Principal and Interest on Capital Leases	\$ (93,348) (560,508)
Net cash provided by (used for) capital and related financing activities	\$ (653,856)
Cash flows from investing activities: Purchase of investments Proceeds from sales or maturities of investments Interest income on cash, cash equivalents, and investments	\$ (1,166,642,500) 1,131,389,902 54,220,120
Net cash provided by (used for) investing activities	\$ 18,967,522
Net increase in cash and cash equivalents	(6,159,501)
Cash and cash equivalents - July 1, 2015	 83,350,426
Cash and cash equivalents - June 30, 2016	\$ 77,190,925
Reconciliation of cash and cash equivalents: Per the Statement of Net Position: Cash and cash equivalents Less: Securities Lending Cash Equivalents	\$ 77,209,875 (18,950)
Cash and cash equivalents per the Statement of Cash Flows	\$ 77,190,925

Reconciliation of operating income to net cash provided by operating activities:  Operating gain	\$ 43,998,759
Adjustments to reconcile operating income to net cash provided	
by (used for) operating activities:	
Depreciation	534,740
Interest, dividends, rents and other investment income	(54,220,120)
Net decrease in fair value of investments	53,628,154
Changes in assets, liabilities, and deferred inflows and outflows:	
(Increase) decrease in receivables	3,338,204
(Increase) decrease in tuition contributions receivable	10,510,047
(Increase) Decrease in assets	25,084
Increase (decrease) in deferred outflows	(766,734)
Increase (decrease) in accounts payable	(111,845)
Increase (decrease) in amounts due to program participants	(304,055)
Increase (decrease) in current tuition benefits payable	11,238,504
Increase (decrease) in current compensated absences	113,981
Increase (decrease) current obligations under capital lease	(30,677)
Increase (decrease) in noncurrent tuition benefits payable	(92,398,551)
Increase (decrease) in noncurrent compensated absences	(157,231)
Increase (decrease) non current obligations under capital lease	(318,381)
Increase (decrease) in net pension liability	1,685,000
Increase (decrease) in deferred inflows	(823,000)
Net cash provided by (used for) operating activities	\$ (24,058,122)
Noncash investing, capital, and financing activities: The following transaction occurred prior to the statement of net position date:	
Change in fair value of investments	\$ (53,628,154)

Assets:	
Cash and cash equivalents (Note 1E and 3)	\$ 122,905,294
Receivables:	
Interest and dividends	2,282,482
Accounts receivable	93,498
Pending trades receivable	307,871
Investments:	
Bonds	90,773,560
Mutual funds - Non Index	662,263,705
Mutual funds - Index	1,722,301,927
Stable Value	671,798,663
Equities	 62,972,888
Total investments	3,210,110,743
Total Assets	 3,335,699,888
Liabilities:	
Accounts payable	960,521
Due to program participants (Note 1L)	4,656,355
Program distributions payable	 793,714
Total liabilities	 6,410,590
Net position held in trust for program	
participants	\$ 3,329,289,298

#### VIRGINIA529 STATEMENT OF CHANGES IN FIDUCIARY NET POSITION PRIVATE PURPOSE TRUST FUND For the Year Ended June 30, 2016

A	D	D	ľ	T	I	O	N	S

Contributions:	
From participants	\$ 433,789,527
Total contributions	 433,789,527
Investment income:	
Net decrease in fair value of investments	(44,758,733)
Interest, dividends, and other investment income	100,424,804
Other	 -
Total investment income	55,666,071
Less investment expense	 (4,676,659)
Net investment income	 50,989,412
Total additions	 484,778,939
DEDUCTIONS	
Educational expense benefits	203,428,637
Shares redeemed	23,616,329
Other Expenses	 1,132,076
Total deductions	 228,177,043
Changes in net position	256,601,896
Net position:	
July 1, 2015	 3,072,687,401
June 30, 2016	\$ 3,329,289,298



# Notes to the Financial Statements





#### 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 (effective October 1, 2016, former *Code* sections 23-38.75 through 23-38.87:1 were repealed pursuant to Chapter 588, 2016 Acts of Assembly). VA529 operates the Commonwealth's Internal Revenue Code (IRC) §529 qualified tuition plan, which offers four programs, Virginia529 prePAID (prePAID), Virginia529 inVEST (inVEST), CollegeAmerica and CollegeWealth.

prePAID is a defined benefit program, which offers contracts, at actuarially determined amounts, that provide for 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. prePAID has a limited enrollment period each year, and is open to children in the ninth grade or younger if the child or participant is a Virginia resident. Since inception, over 122,382 accounts have been opened, with 65,101 contracts remaining active at year-end. The program had total assets invested from contributions, net earnings and other revenue of approximately \$2.4 billion as of June 30, 2016. The program invests contract payments to meet future obligations. 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 statutorilycreated 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 prePAID. VA529 annually assigns net operating revenue to prePAID to support its funded status. Accordingly, net operating revenue of \$28,429,199 was allocated within the enterprise fund to prePAID for FY2016 via an interfund transfer. The program'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 prePAID's contractual obligations, in the event of a funding shortfall.

inVEST 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 by making contributions into the investment portfolio(s) of their choice. Participants are allowed to select from among 19 investment portfolios. Two additional portfolios remain open in the inVEST program but are closed to new participants. inVEST accounts are subject to investment risks, including the possible loss of principal. The inVEST program is open year round and has no age or residency restrictions. inVEST began operation in December 1999. As of June 30, 2016, 282,662 accounts had been opened, with 216,283 accounts remaining active at year end. These accounts had a net asset value of approximately \$3.3 billion as of June 30, 2016. Investment management fees and inVEST operating expenses are paid on a pro-rata basis by each inVEST account owner and vary according to the portfolio selected. inVEST accounts provide investors with the same federal and state tax benefits available to participants in the prePAID program.

CollegeAmerica, a broker-sold IRC §529 college savings option, is a defined contribution savings program and is administered by the American Funds pursuant to a contract using 41 of the American Funds mutual funds. CollegeWealth is also a defined contribution savings program under which participants invest in FDIC-insured savings products offered through participating banks. CollegeAmerica and CollegeWealth are presented as Other Information. 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 Board administers VA529, consisting of four ex-officio members and seven non-legislative citizens, four to be appointed by the Governor, one to be appointed by the Senate Committee on Rules, and two to be 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 basic financial statements of the Commonwealth.

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

#### A. <u>Basis of Presentation</u>

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, 2016. For financial reporting purposes, VA529 includes all funds and entities over which VA529 is financially accountable and exercises oversight authority.

#### C. <u>College Savings Systems</u>

College Savings Systems (CSS) is the software development and technical services division of VA529, which was formed in 2004. VA529 has an agreement with Ellucian (formerly SunGard Higher Education) to maintain the College Savings Program (CSP) module of the Banner software suite. CSS provides record keeping software and technical services to other savings and prepaid qualified tuition plans including Virginia. As of June 30, 2016, CSS also provided services to Maryland, Texas, and Washington. On June 27, 2016 VA529 notified the three aforementioned states of its intent to terminate their respective contracts. Services will be provided under the terms of the respective contracts until final termination during the next two fiscal years. Once the contracts are terminated, CSS will be dissolved.

VA529's contracts with the states have two components; maintenance fees and fees for additional services. The maintenance fees are annual charges assessed to support the Banner CSP module and continued development thereof, and benefits all users/clients. The programming fees are assessed to the states when providing specific software programming changes, at their request, to enhance or change

application, contract, transaction or distribution processing; customer web access; or make other system enhancements. The programming fees vary year-to-year based on user/client needs.

CSS fee revenue is included in the enterprise fund as operating revenue. In accordance with the 2016 Appropriation Act, revenue from operations performed for programs outside of Virginia in fiscal 2016, exceeded all direct and indirect costs of providing the services.

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

VA529 reports the activity of the prePAID 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 on a user-charge basis to external users. All operating expenses and revenue collected to support VA529 operations, including administrative fee revenue and expenses of inVEST, CollegeAmerica and CollegeWealth, are reflected in the enterprise fund.

VA529 reports the activity of the inVEST 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 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 prePAID 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 CSS as well as the prePAID, inVEST, CollegeAmerica, and CollegeWealth programs. Operating expenses include contractual and personal services.

All proprietary funds reported herein apply all applicable GASB principles per the *Codification of Governmental Accounting and Financial Reporting Standards* (GASB Codification).

#### E. 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. Beginning in fiscal 2016 investments

are reported on a trade date basis. Investments in prior fiscal years were reported on a settlement date basis. The change to trade date accounting more accurately depicts VA529's financial position as of fiscal year end as all securities pending settlements at June 30, 2016 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.

#### F. 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.

#### G. prePAID Contract Payments

prePAID contract purchasers can elect to pay their contract in full via a lump sum payment or over time. Customized financing options are available for purchasers electing to pay over time, allowing for payments to be spread over a period determined by the contract purchaser. Contracts must be paid in full prior to drawing benefits and accordingly 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. prePAID contract payments receivable represent the actuarially determined present value of future payments due from contract holders.

Approximately 53.92 percent of contract holders of outstanding (active) contracts as of June 30, 2016 had elected to pay over time.

#### H. <u>Accounts Receivable</u>

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 and the CollegeWealth programs, as well as CSS service fees.

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 \$30 billion. The fee is reduced to seven basis points (.07 percent) for amounts in excess of \$30 billion up to \$50 billion with further reductions above \$50 billion. This fee is calculated and accrued daily and paid to VA529 on a quarterly basis.

CollegeWealth banking partners, Branch Banking & Trust (BB&T) and Union Bank & Trust, pay VA529 an annual fee equal to ten basis points (.10 percent) of the average daily assets held in 529 Bank Products issued by the Banks under the Program. These fees are calculated, accrued and paid to VA529 on a quarterly basis.

#### I. 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 in accordance with GASB Statement No. 68.

Changes in net pension liability not included in pension expense are reported as deferred outflows of resources or deferred inflows of resources. Employer contributions subsequent to the measurement date of the net pension liability are reported as deferred outflows of resources. See Note 10, Retirement and Pension Plan for additional information.

#### J. 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.

#### K. <u>Capital Assets</u>

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, ranging from five to forty years. Intangible assets with a value of \$100,000 or greater are capitalized. These assets are depreciated 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. These assets are also capital assets and adhere to the same policies of other property, plant and equipment. VA529 has recorded one type of intangible asset, computer software. These assets were acquired through retail purchases and/or internally generated, and are reported in Note 8, Capital Assets.

#### L. Amounts Due To Program Participants

Amounts due to program participants reflects accrued amounts due and payable at June 30, 2016 to participants for distributions to other qualified tuition programs, or 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.

#### M. Accrued Leave Policy

Prior to January 1, 2016, employees accrued annual leave at a rate of four to nine hours semi-monthly, depending on their length of service. Rates varied for regular part-time employees depending on normal work hours. The maximum accumulation was dependent upon years of service, but in no case did it exceed 54 days at the end of the leave year. All employees leaving the agency were paid for accrued vacation 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.

Effective January 1, 2016, VA529 converted to a Paid Time Off (PTO) Policy with a defined leave year of January 1 through December 31. VA529 provides a bank of PTO for employees to use at their discretion. The PTO bank replaces separate leave types for vacation, sick leave, community service and various other leave types. The policy applies to all leave-eligible employees including regular full-time and regular part-time employees. The policy reduces both the maximum leave allowable for carry over at calendar year end and VA529's total liability for compensating absences at June 30.

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. Employees may use this time in lieu of or in addition to their PTO. However, they will not accrue any time in the annual bank after the December 24, 2015 accrual.

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 hours regularly scheduled 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 pay out of unused leave will occur automatically at the end of the 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. The payment will be made by February 1 of the subsequent leave year. 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 after January 1, 2016 were/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. The maximum allowable payout includes both annual bank and PTO time that is accrued but unused. 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, 2016, 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.

VA529 participates in the Virginia Sickness and Disability Program (VSDP), which was instituted in 1999 and replaced the traditional sick leave plan. The Virginia Retirement System (VRS) administers the program to provide income protection for absences due to sickness or disability. For employees hired after July 1, 2009, there is a one year waiting period for VSDP and coverage is not provided from the first day on the job.

After a seven calendar-day waiting period following the first incident of disability, eligible employees receive short-term disability benefits ranging from 60 to 100 percent of compensation up to a maximum of 125 work days, based upon months of State service. After a 180 calendar-day waiting period (125 work days of short-term disability), eligible employees receive long-term disability benefits equal to 60 percent of compensation until they return to work, until age 65, or until death. Employees enrolled in this program are not eligible for disability retirement benefits under the VRS.

One employee, hired prior to January 1, 1999, opted to remain in the traditional sick leave program. The employee is not covered under VSDP and remains eligible for disability retirement. Non-VSDP sick leave is payable upon termination of employment and is limited to 25 percent of the value accumulated or \$5,000, whichever is less, under the Commonwealth of Virginia's sick leave pay-out policy for employees with five or more years of service.

All State agencies are required to contribute to the cost of providing disability benefits. Initial contribution requirements to fund the program were determined by the VRS actuary based on an estimate of the amount of the liability for disability benefits that would transfer from VRS to the new program. The contribution requirement was 1.78 percent of payroll for State employees. Further information about this program can be found in the Commonwealth of Virginia's Comprehensive Annual Financial Report.

#### N. prePAID – Investment in Real Estate

On February 15, 2008, VA529 established Aventura Holdings LLC, a limited liability company, for the purpose of acquiring and owning real estate. VA529 is the sole member of Aventura. On March 20, 2008, VA529's Board approved adding Aventura as an investment vehicle under prePAID and the purchase by Aventura Holdings of a 48,500 square foot office building in Chesterfield County, Virginia. Aventura was funded with \$8.8 million and acquired the office building in April 2008.

The investment in Aventura is reflected in prePAID's assets at \$7.4 million as of fiscal year end. The value was determined by a professional real estate appraisal in June 2016.

VA529 leases the building from Aventura. The Lease was renewed by VA529 for another five years beginning July 1, 2013. The Lease is carried as a capital lease in the enterprise fund financial statements, as VA529 intends to renew the Lease every five years and occupy the building for a time period greater than 75 percent of the asset's useful life. Accordingly, the financial statements reflect the lease obligation as a liability and the office building as an asset in enterprise fund's financial statements. See the Long-Term Liabilities Note 7 below for a description of the Lease Agreement. Aventura has also established a renewal and replacement reserve funded from 27

percent of the annual rental payments received from VA529 to cover capital improvements to the building.

#### O. <u>Pensions</u>

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.

#### 2. Cash, Cash Equivalents, and Investments

The Board of VA529 has established Statements of Investment Policy and Guidelines for VA529's 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 prePAID portfolio, at market value, is 32.5 percent equities, 25.0 percent core fixed income, 27.5 percent non-core fixed income, and 15 percent alternatives. The Board's allocation targets for the inVEST program 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 Boardappointed 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 28 external managers and/or funds. See complete lists of Investment Managers in Appendices A and B. In addition, prePAID 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. In recent years, annual Appropriation Acts contained language that prohibited the allocation of interest on balances held at the State Treasury to VA529 and certain other agencies. Accordingly, VA529 minimized amounts held at Treasury. As a result of action taken by the Governor and General Assembly during the 2016 Session, the 2016 Amendments to the 2015 Appropriation Act restored the distribution of interest earnings on balances held at the State Treasury to VA529 during fiscal 2016, and the 2016 Appropriation Act contained no provision for withholding interest earnings during the next biennium. Accordingly, VA529 began receiving interest earnings on a quarterly basis from the Commonwealth based on its relative participation during the quarter.

inVEST 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. At fiscal year-end, 41 mutual funds were approved and available for investment through the CollegeAmerica program. Two additional funds were approved, but yet to be available for investment as of the fiscal year end. The Board has oversight and review authority for the investment activity and operations of the CollegeAmerica program. The American Funds is required to seek renewed approval of the use of these mutual funds on an annual basis.

#### **Private Equity Investment Commitments**

In fiscal year 2016, VA529 extended investment commitments under limited partnership agreements for private equity investments in prePAID. At June 30, 2016, VA529's investment commitments amounted to \$157 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 or CollegeWealth. All deposits of the prePAID and inVEST programs 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, 2016, all investments of the prePAID and inVEST 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 61 percent of total prePAID investments (reported as enterprise fund assets) and 75 percent of total inVEST investments (reported as a private-purpose trust fund) are invested in these vehicles. All investments of the CollegeAmerica program are invested in 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.

#### <u>Interest Rate Risk – Fixed Income Securities</u>

As of June 30, 2016, VA529 had fixed income investment securities held in prePAID and inVEST 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.

prePAl	D	I	)	Duration		
Investment Type	Fair Value	Less than 1	1-5	6-10	More than 10	Effective Duration (years)
Money Market Funds	\$ 73,533,653	\$ 73,533,653	-	-	-	-
Bank Loans	221,438,069	2,012,985	\$169,278,836	\$50,146,248	-	0.17
Non-Agency Mortgage- Backed Securities	52,745,582	-	6,253,222	2,144,181	\$44,348,179	1.00
Mortgage-Backed Securities - Agency	16,002,726	-	1,019,980	6,643,960	8,338,786	2.52
Asset-Backed Securities	1,002,915	-	1,002,915	-	-	2.19
Corporate Bonds	223,574,761	1,360,054	82,147,869	132,023,608	8,043,230	4.51
Convertible Securities	91,075,442	3,020,011	72,109,826	6,542,929	9,402,676	-
Bond Funds	516,922,974	-	329,044,033	187,878,941	-	6.14
Treasury and Agency Securities	206,805	206,805	-	-	-	3.51
Stable Value <sup>1</sup>	114,562,736	-	114,562,736	-	-	3.49
Total	\$ 1,311,065,664	\$ 80,133,508	\$ 775,419,418	\$385,379,866	\$ 70,132,872	-
inVES	T	I	)	Duration		
Investment Type	Fair Value	Less than 1	1-5	6-10	More than 10	Effective Duration (years)
Money Market Funds	\$122,452,849	\$122,452,849	-	-	-	-
Corporate Bonds	90,773,560	231,000	\$31,257,366	\$55,875,155	\$3,410,039	4.60
Bond Funds	541,047,231	-	340,598,865	200,448,366	-	6.18
Stable Value <sup>1</sup>	671,798,663	-	671,798,663	-	-	3.89
Total	\$1,426,072,303	\$122,683,849	\$1,043,654,894	\$256,323,521	\$3,410,039	-

 $<sup>^{1}</sup>$ 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 prePAID and inVEST as of June 30, 2016 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, 2016, VA529 had no investment securities held in separately managed accounts in prePAID and inVEST in any one issuer that represented 5 percent or more of total investments.

#### **Mutual Fund Risks**

At June 30, 2016, VA529 participated in a number of open-end domestic and foreign equity and fixed income mutual funds and collective trusts in prePAID and inVEST. 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 <a href="Virginia529.com">Virginia529.com</a>. A prospectus may also be requested directly from each of the underlying fund managers. Prospectuses for each CollegeAmerica 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 prePAID, inVEST and CollegeAmerica mutual funds.

#### **Currency Risk**

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, 2016, 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 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.

prePAID Currency Exposures by Asset Class							
Currency	Con	vertible Bonds	Cash & Cash tible Bonds Equivalents			Total	
British Pound Sterling	\$	3,267,219	\$	186,367	\$	3,453,587	
Canadian Dollar		2,510,341		56,940		2,567,281	
Euro		27,801,271		381,511		28,182,782	
Hong Kong Dollar		1,291,337		35,609		1,326,946	
Japanese Yen		7,898,796		11,060		7,909,856	
Singapore Dollar		-		5,571		5,571	
Swedish Krona		-		4		4	
Swiss Franc		1,742,150		849		1,742,999	
Total	\$	44,511,114	\$	677,911	\$	45,189,025	

Note: Amounts shown in U.S. dollars using June 30, 2016 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, 2016 approximately 6 percent of prePAID investments were invested in these vehicles.

Rating Agency	inVEST Credit Quality by Investment Type							
	Corporate Bonds	M	Ioney Market Funds	В	Bond Funds <sup>2</sup>	S	Stable Value <sup>3</sup>	
S&P's Quality Rating								
AAA	-	\$	122,452,849		-		-	
BBB	\$ 748,291		-		-		-	
BBB-	4,761,546		-		-		-	
BB+	10,957,293		-		-		-	
BB	13,636,463		-		-		-	
BB-	13,012,253		-		-		-	
B+	14,621,850		-		-		-	
В	12,602,918		-		-		-	
B-	11,001,460		-		-		-	
Less than B-	8,640,105		-		-		-	
Moody's Quality Rating								
Ba2	304,031		-		-		-	
Ba3	301,500		-		-		-	
Unrated <sup>1</sup>	185,850		-	\$	541,047,231	\$	671,798,663	

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

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

<sup>&</sup>lt;sup>3</sup>Stable Value Contracts are not rated directly by Moody's, however the underlying investments weighted average credit quality rating is Aa1

Rating Agency				prePAID	Credit Quality	by Investment	Туре			
	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 Securities	Stable Value <sup>3</sup>
S&P										
AAA	\$ 15,319,886	-	\$ 1,019,980	-	-	-	\$39,621,704	-	-	-
AA+	2,531,595	-	13,576,356	-	-	-	-	-	-	-
AA	3,129,131	-	-	-	-	-	-	-	-	-
AA-	1,322,114	-	-	-	-	-	-	-	-	-
A+	2,153,501	-	-	-	-	\$ 3,815,280	-	-	-	-
A	2,486,176	-	-	-	-	3,287,611	-	-	-	-
A-	837,284	-	-	-	-	1,582,548	-	-	-	-
BBB+	1,391,714	-	-	-	-	8,766,039	-	-	-	-
BBB	2,951,994	-	-	\$ 7,215,108	\$ 925,875	3,945,784	-	-	-	-
BBB-	3,149,566	\$ 1,002,915	-	7,250,689	10,460,391	3,638,021	-	-	-	-
BB+	1,251,264	-	-	16,656,633	28,987,375	1,625,674	-	-	-	-
BB	1,772,131	-	-	20,187,429	34,282,963	2,216,829	-	-	-	-
BB-	621,295	-	-	28,085,701	30,479,703	-	-	-	-	-
B+	-	-	-	37,262,684	36,985,208	-	-	-	-	-
В	695,354	-	-	53,892,358	31,037,909	-	-	-	-	-
B-	490,279	-	-	12,212,408	26,586,551	-	-	-	-	-
Less than B-	1,811,485	-	-	5,142,504	21,673,972	-	-	-	-	-
Moody's		•	•						•	
Aa3	1,526,048	-	-	-	-	-	-	-	-	-
A1	18,487	-	-	-	-	-	-	-	-	-
A2	-	-	-	-	-	4,724,537	-	-	-	-
Baa1	692,615	-	-	-	-	1,050,939	-	-	-	-
Baa3	-	-	-	-	-	2,538,250	-	-	-	-
Ba1	1,144,724	-	-	-	-	1,626,209	-	-	-	-
Ba2	-	-	-	-	836,718	-	-	-	-	-
Ba3	-	-	-	-	703,500	-	-	-	-	-
B1	185,316	-	-	-	-	-	-	-	-	-
B2	-	-	-	-	-	1,522,043	-	-	-	-
Less than B2	407,341	-	-	-	-	-	-	_	-	-
Unrated <sup>1</sup>	6,856,283	-	1,406,390	33,532,556	614,595	50,735,678	33,911,949	\$516,922,974	\$ 206,805	\$ 114,562,736
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<sup>&</sup>lt;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 udnerlying investments weighted average credit quality rating is A<sup>3</sup>Stable Value Contracts are not rated directly by Moody's, however the udnerlying investments weighted average credit quality rating is Aa2

#### 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, 2016, three separate account managers were permitted to use derivatives as shown in the table below.

Program	Manager	Asset Class
prePAID	Prudential Investment Management, Inc.	High Yield Fixed Income
inVEST	Prudential Investment Management, Inc.	High Yield Fixed Income
prePAID	Brookfield Investment Management, Inc.*	Mortgage-Backed Securities
prePAID	Advent Capital Management, LLC	Convertible Bonds

<sup>\*</sup>In May 2016, Brookfield announced that Schroder Investment Management would acquire Brookfield's securitized products investment management business and team. The transaction was completed in September 2016.

#### (i) Derivatives held in Prudential Investment Management Accounts

Pursuant to its investment management agreement, Prudential Investment Management 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 inVEST nor prePAID Prudential accounts held any derivatives at June 30, 2016.

#### (ii) <u>Derivatives held in Brookfield Investment Management Account</u>

Pursuant to its investment management agreement, Brookfield 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, 2016, 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.

#### **Investment Derivatives - U.S. Treasury Futures Contracts**

	Changes in	Fair Value	Fair Va	lue at June 30, 2	2016
	Classification	Amount	Classification	Amount	Notional Amount
<b>Enterprise Fund</b>	Revenue	\$111,320	Investment	\$206,805	\$13,040,367

#### (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 the use of 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.

prePAID Currency Forwards									
Currency	Cost	Foreign Exchange Purchases	Foreign Exchange Sales	Market Value					
British Pound Sterling	\$3,724,419	\$256,758	(\$3,677,530)	(\$3,420,772)					
Canadian Dollar	2,483,721	-	(2,514,362)	(2,514,362)					
Euro	28,356,216	678,916	(28,781,598)	(28,102,682)					
Hong Kong Dollar	1,320,995	-	(1,322,117)	(1,322,117)					
Japanese Yen	7,423,708	205,026	(8,132,711)	(7,927,684)					
Swiss Franc	1,789,639	-	(1,819,276)	(1,819,276)					
U.S. Dollar	(45,098,698)	46,245,478	(1,146,780)	45,098,698					
Total	-	\$47,386,179	(\$47,394,374)	(\$8,194)					

Note: Amounts shown in U.S. dollars using June 30, 2016 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 prePAID and inVEST 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, 2016, VA529 had the following stable value investments outstanding in the respective programs as shown in the table below.

		Notional	<b>Effective</b>	Maturity	Crediting
Program	Wrap Provider	Amount	Date	Date	Rate
prePAID	American General Life	\$28,391,262	2/21/2014	Open ended	1.65%
	RGA	28,375,590	6/22/2016	Open ended	2.26%
	State Street Bank	28,375,461	5/1/2002	Open ended	2.72%
	Voya Retirement & Annuity	29,420,423	12/3/2002	Open ended	2.43%
inVEST	American General Life	\$133,505,203	1/16/2014	Open ended	1.44%
	Prudential Retirement Ins. & Annuity	134,868,791	1/30/2014	Open ended	2.14%
	RGA	133,498,221	8/28/2015	Open ended	1.97%
	State Street Bank	134,702,404	5/1/2002	Open ended	2.09%
	Voya Retirement & Annuity	27,489,549	12/3/2002	Open ended	3.15%
	Voya Retirement & Annuity	107,734,495	10/5/2012	Open ended	1.57%

At June 30, 2016, the fair value of the underlying investments for both prePAID and inVEST exceeded 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 it would have a separate fair value only in the circumstance that the fair value of the associated underlying investment pool fell below the book value of the wrap contracts. In that case the fair value of the wrap contracts would be the amount required to bring the total value of the stable value investments up to the book value of the wrap contracts. Therefore, there is no separate fair value associated with the wrap contracts as of June 30, 2016.

In the prePAID program, the fair value of the stable value investments at June 30, 2016, was \$118,682,718.

prePAID - Stable Value Components	<u>Fair Value</u>
Underlying Investments	\$118,682,718
Wrap Contracts	<del></del> _
Total	<u>\$118,682,718</u>

In the inVEST program, the fair value of the stable value investments at June 30, 2016, was \$690.820.475.

<u>inVEST - Stable Value Components</u>	<u> Fair Value</u>
Underlying Investments	\$690,820,475
Wrap Contracts	
Total	<u>\$690,820,475</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.

prePAID investments measured at fair value as of June 30, 2016:

		Fair Value Measurements Using:			
		Quoted Prices in	Significant		
		Active Markets	Other	Significant	
		for Identical	Observable	Unobservable	
		Assets	Inputs	Inputs	
prePAID Investments By Fair Value Level	Fair Value	(Level 1)	(Level 2)	(Level 3)	
Cash & Cash Equivalents					
Cash with the Treasurer of VA	\$ 592,115	\$ 592,115	=	-	
Money Market Funds	73,533,653	73,533,653	-	-	
Foreign Currencies	677,911	677,911			
Total Cash & Cash Equivalents	74,803,679	74,803,679	=		
Debt Securities					
US Treasury & Agency Securities	206,805	206,805	=	=	
Corporate Bonds	223,574,761	-	\$223,574,761	-	
Convertible Bonds	91,075,442	-	91,075,442	-	
Bond Funds	67,498,686	67,498,686	=	=	
Bank Loans	221,438,069	=	221,438,069	=	
Asset-Backed Securities	1,002,915	=	1,002,915	=	
Mortgage-Backed - Agency	16,002,726	=	16,002,726	=	
Mortgage-Backed - Non Agency	52,745,582		52,745,582		
Total Debt Securities	673,544,987	67,705,491	605,839,496		
Equity Securities					
Equities	232,986,991	228,290,383	4,696,608	-	
Equity Real Estate	7,400,002	-	=	\$ 7,400,002	
Index Funds - Equity	124,775,762	124,775,762	=	=	
International & Emerging Markets Funds	419,508,353	419,508,353			
Total Equity Securities	\$ 784,671,109	\$ 772,574,498	\$ 4,696,608	\$ 7,400,002	
Total Investments by Fair Value Level	\$1,533,019,774	\$ 915,083,668	\$610,536,104	\$ 7,400,002	

#### <u>Description of prePAID investments measured at fair value:</u>

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 yearend 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.

#### prePAID investments reported at NAV:

			Redemption		
			Unfunded	Frequency (if	Redemption
Investments Measured at the NAV		Fair Value	Commitments	Currently Eligible)	Notice Period
Hedge Funds					
Harmonic - Hedge Fund	\$	90,658,667	-	Monthly	14 Days
Aurora - Hedge Fund of Funds		44,036,976	-	Quarterly	95 Days
Equity Real Estate					
UBS Realty Investors		84,075,808	-	Quarterly	60 Days
Private Equity Funds of Funds					
Private Advisors		31,377,958	\$ 24,872,994		
Adams Street Partners		64,611,140	99,476,300		
Aether Investment Partners		8,668,239	23,764,040		
Commonfund		9,629,298	9,150,000		
Common Trust Funds & Other					
Wellington Management		187,878,941	-	Monthly	10 Days
State Street Global Advisors		119,809,099	-	Daily	2 Days
Ferox Capital		70,141,757	-	Daily	2 Days
BlackRock		71,594,491	-	Daily	3 Days
Total Investments Measured at the NAV		782,482,374			
Total Investments at Fair Value and NAV	\$ 2	2,315,502,148			

#### Description of investments measured at NAV:

- 1. Hedge Funds: This investment type includes two hedge funds. The Harmonic Alpha Plus Macro Fund's investment strategy is global macro, consisting of a range of strategies in global fixed income, equity, commodity and currency markets. The Aurora Offshore Fund Ltd. II is a multi-strategy hedge fund of funds. Underlying investment strategies include, but are not limited to, long/short equities, opportunistic, long/short credit, portfolio hedge, macro and event-driven strategies. The fund is 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 Equity Funds of Funds: This investment type includes private equity funds of funds managed by four managers. These investments cannot be redeemed from the fund. Capital is generally expected to be called during the initial 4 to 5 years and is expected to be returned through liquidations of underlying fund investments during the 3rd through 10th year. Investments with Adams Street Partners are diversified geographically through use of the U.S. and non-U.S. centric funds. VA529 is also diversified by vintage year with respect to

these investments. VA529's investments in Commonfund's Natural Resources IX fund and Aether Investment Partners' Real Assets III, LP Fund seek to gain exposure to private investments in various natural resources sectors. VA529's investment in Private Advisors seeks to gain exposure to small company growth equity and buyout, distressed/turnaround, and opportunistic fund managers located in North America through investments in the Small Company Buyout Fund IV and Small Company Private Equity Fund VI. The fair values of investments in this type have been determined using the March 31, 2016 NAV of VA529's ownership of the partnership, adjusted for cash flows (capital calls) through June 30, 2016.

4. Common Trust Funds & Other: This investment type includes three common trust funds. State Street Global Advisors' U.S. Treasury Inflation Protected Securities Index Non-Lending Common Trust Fund, invests in securities or other pooled vehicles in order to track performance of the Barclays Capital U.S. Treasury Inflations Protected Securities Index. Wellington Management Co.'s Emerging Market Debt Common Trust Fund invests in securities, derivatives, private placements or other pooled vehicles in order to generate excess returns over the J.P. Morgan Emerging Markets Bond Index Plus. Additionally, this investment type includes Ferox Capital's Salar Fund PLC, a UCITS IV compliant Dublin, Ireland based Public Limited Company. The Salar Fund's investment strategy is long-only global convertible bonds. The fair value of investments in this type have been determined using the NAV per share of the investments. BlackRock Intermediate Term Credit Bond Index Non-Lendable Fund "B" is an index fund that seeks investment results that correspond generally to the price and yield of a particular index. Through investment in debt securities the fund seeks to approximate as closely as practicable the total rate of return of the intermediate-term division of the Barclays Intermediate Credit Bond Index, which consists of credit bonds with maturities between one and ten years.

#### inVEST investments measured at fair value as of June 30th, 2016:

	Fair Value Measurements Using							
Investments By Fair Value Level	1	Quoted Prices in Active Markets for Identical Assets Fair Value (Level 1)		Significant Other Observable Inputs (Level 2)		Unob	Significant Unobservable Inputs (Level 3)	
Cash & Cash Equivalents								
Cash with Wells Fargo	\$	2,456,467	\$	2,456,467		-		-
Money Market Funds		122,452,849		122,452,849		-		-
Total Cash & Cash Equivalents		124,909,316		124,909,316		=		-
Debt Securities								
Corporate Bonds		90,773,560		-	\$	90,773,560		-
Emerging Markets - Debt		178,172,807		178,172,807		-		-
Index Funds - Debt		362,874,424		362,874,424		-		-
Total Debt Securities		631,820,791		541,047,231		90,773,560		-
Equity Securities								
Equities		62,972,888		62,972,888		-		-
Equity Real Estate		174,307,970		174,307,970		-		-
Index Funds - Equity		1,338,153,039		1,338,153,039		-		-
International & Emerging Markets Funds		331,057,392		331,057,392		-		-
Total Equity Securities		1,906,491,289		1,906,491,289		-		-
Total Investments by Fair Value Level	\$	2,663,221,396	\$	2,572,447,836	\$	90,773,560	\$	-

#### <u>Description of inVEST investments measured at fair value:</u>

- 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.

#### 5. Securities Lending Transactions

A portion of the balance sheet line item Cash and Cash Equivalents represents cash (\$18,950) held in the General Account of the Commonwealth and thus represents VA529's allocable share of securities lending transactions conducted therein. Information related to the credit risk of these investments and securities lending transactions held in the General Account is available on a statewide level in the Commonwealth of Virginia's Comprehensive Annual Financial Report. The Commonwealth's policy is to record unrealized gains and losses 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 \$87 for securities lending transactions in fiscal year 2016.

#### 6. Commitments

VA529 is committed under operating leases for business equipment and building space rental. The equipment lease is for a three-year term. The space rental is for one year, automatically renewing each year. In both cases, VA529 expects that in the normal course of business, these leases will be renewed or replaced by similar leases. Rental expense for the fiscal year ended 2016 was \$320,776.

As of June 30, 2016, VA529 had the following total future minimum rental payments due under the above leases.

Fiscal Year	Amount
2017	\$ 191,228
2018	194,558
2019	128,813
Total future minimum rental	
payments	\$ 514,599

#### 7. Long-Term Liabilities

Long-term liabilities include tuition benefits payable, capital lease payments, 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 prePAID.

#### B. Capital Lease

On July 1, 2013, VA529 entered into the first 5-year extension of its Lease Agreement with Aventura Holdings, LLC under which it leases a 48,500 square foot office building through June 30, 2018. The Lease provides for two additional 5-year renewal options. 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	<b>Annual Base</b>		
Periods (1)	Rent		
FY16	\$	560,508	
FY17	574,521		
FY18	588,884		
FY19	603,606		
FY20		618,696	

(1) 2016 rent at \$11.00 psf with a 2.5% annual escalator.

<b>Future Minimum</b>	
Lease Payments	Amount
FY 2021-2025	\$3,333,374
FY 2026-2030	3,771,406
FY 2031-2035	4,267,000
FY 2036-2040	4,827,719
FY 2041-2045	5,462,121
FY 2046-2048	3,616,026

(2) Future minimum lease payments calculated with a 2.5% annual escalator and are subject to change upon renegotiation of the lease. See Note 1N – prePAID Investment in Real Estate.

Aventura has also established a renewal and replacement reserve funded from 27 percent of the annual rental payments received from VA529 to cover capital improvements to the building. The reserve funding schedule is set forth below.

Base Reserve Periods	_	al Reserve unding
July 1, 2015 – June 30, 2016	\$	152,866
July 1, 2016 – June 30, 2017		156,688
July 1, 2017 – June 30, 2018		160,605

#### C. Compensated Absences

Compensated Absences represent the long-term liability for accrued annual, sick or disability credits, compensatory, overtime, on-call, recognition and other leave for all leave-eligible employees employed on June 25, 2016. 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.

#### D. Pension Liability

Employees of VA529 are employees of the Commonwealth of Virginia. The employees participate in one of two defined benefit pension plans or a hybrid retirement plan administered by the Virginia Retirement System. The Commonwealth's actuarially determined Net Pension Liability is calculated as of the previous fiscal year end. VA529's proportion of this liability is based on its actuarially determined employer contributions to the pension plan. See Note 10 – Retirement and Pension Plan for additional information on this liability.

Changes in long-term liabilities are shown below:

	Be	ginning							Du	e Within
	В	alance	1	ncreases	De	ecreases	Endi	ng Balance	0	ne Year
Compensated										
absences	\$	640,014	\$	587,965	\$	631,215	\$	596,764	\$	415,247
<b>Tuition Benefits</b>	2,1	16,768,825		81,957,446	16	53,117,493	2,0	35,608,778	2.	50,472,458
Net Pension Liability		8,855,000		1,685,000				10,540,000		-
Capital lease										
obligation		5,708,090				349,056		5,359,034		334,376
Total	\$ 2,13	31,971,929	\$	84,230,411	\$ 16	64,097,764	\$ 2,0	52,104,576	\$ 2.	51,222,081

#### 8. Capital Assets

The following schedule presents capital asset activity of VA529 for the year ended June 30, 2016.

Enterprise Fund	Balance July 1, 2015	Increases	Decreases	Balance June 30, 2016
Depreciable capital assets:				
Equipment	\$ 1,993,891	93,348	385,927	\$ 1,701,312
Software	1,038,466	-	-	1,038,466
Building*	8,800,000			8,800,000
Total Depreciable capital assets:	11,832,357	93,348	385,927	11,539,778
Less accumulated depreciation for:				
Equipment	1,358,441	192,697	385,927	1,165,210
Software	391,315	103,847		495,161
Building	939,524	238,196		1,177,720
Total accumulated depreciation	2,689,279	534,740	385,927	2,838,092
Net depreciable capital assets	9,143,078	(441,392)		8,701,685
Total net capital assets	9,143,078	(441,392)		8,701,685

<sup>\*</sup>Asset purchased under a capital lease

#### 9. Summary of Actuarial Assumptions and Methods

VA529's statute requires that it annually determine the actuarial soundness of prePAID. VA529 has assumed that actuarially sound, when applied to prePAID, means that VA529 has sufficient assets (including the value of future installment payments due under current prePAID 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 prePAID'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 2016, VA529's Board approved a reduction in the assumed future tuition growth rate from 6.5 percent to 5.0 percent for the 2017-18 and 2018-19 academic years, increasing to 6.5 percent thereafter for both four-year and two-year institutions. The assumed investment rate of return remained at 6.25 percent. The reduction in the tuition growth assumption had a positive impact on the funded position. The following assumptions, reflecting the changes approved by the Board, were used in the actuarial valuation for June 30, 2016:

Investment Rate of Return: 6.25 percent per annum.

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

	<u>Universities</u>		<u>Communi</u>	<u>ty Colleges</u>
	Current	Prior	Current	Prior
	<u>assumption</u>	<u>assumption</u>	<u>assumption</u>	<u>assumption</u>
Fall 2017	5.0%	6.5%	5.0%	6.5%
Fall 2018	5.0%	6.5%	5.0%	6.5%
Fall 2019 and thereafter	6.5%	6.5%	6.5%	6.5%

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 50 percent higher than 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 \$57.25 and Annual Distribution Cost per Contract in Payment Status of \$25.35. These expenses were developed by VA529 staff and are assumed to increase annually at the rate of inflation plus 0.5 percent.

The actuarial prePAID 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, 2016, the accrual of the actuarially determined prePAID contract payments receivable and the accrual of the tuition benefits payable both decreased over the prior year. The decrease in the receivable resulted in negative actuarial prePAID contract payments reported as a reduction in operating revenue. The decrease in the payable resulted in negative actuarial prePAID tuition benefit expenses reported as a reduction in operating expenses.

#### **Actuarial Valuation Results**

	2016	2015	Change
prePAID contract payments receivable	\$198,758,778	\$209,268,825	\$(10,510,047)
Tuition benefits payable	\$2,035,608,778	\$2,116,768,825	\$(81,160,047)

#### 10. Retirement and Pension Plan

Employees of VA529 are employees of the Commonwealth of Virginia. The employees participate in one of two defined benefit pension plans or a hybrid retirement plan administered by the Virginia Retirement System (VRS or the System).

#### **Plan Description**

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

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

RETIREMENT PLAN PROVISIONS BY PLAN STRUCTURE						
PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN				
About Plan 1 Plan 1 is a defined benefit plan. The retirement benefit is based on a member's age, creditable service and average final compensation at retirement using a formula. Employees are eligible for Plan 1 if their membership date is before July 1, 2010, and they were vested as of January 1, 2013.	About Plan 2 Plan 2 is a defined benefit plan. The retirement benefit is based on a member's age, creditable service and average final compensation at retirement using a formula. Employees are eligible for Plan 2 if their membership date is on or after July 1, 2010, or their membership date is before July 1, 2010, and they were not vested as of January 1, 2013.	About the Hybrid Retirement Plan The Hybrid Retirement Plan combines the features of a defined benefit plan and a defined contribution plan. Most members hired on or after January 1, 2014 are in this plan, as well as Plan 1 and Plan 2 members who were eligible and opted into the plan during a special election window. (see "Eligible				

• The defined benefit is based on a member's age. creditable service and average final compensation at retirement using a formula. • The benefit from the defined contribution component of the plan depends on the member and employer contributions made to the plan and the investment performance of those contributions. • In addition to the monthly benefit payment payable from the defined benefit plan at retirement, a member may start receiving distributions from the balance in the defined contribution account. reflecting the contributions, investment gains or losses,

#### **Eligible Members**

Employees are in Plan 1 if their membership date is before July 1, 2010, and they were vested as of January 1, 2013.

#### **Hybrid Opt-In Election**

VRS non-hazardous duty covered Plan 1 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014.

#### **Eligible Members**

Employees are in Plan 2 if their membership date is on or after July 1, 2010, or their membership date is before July 1, 2010, and they were not vested as of January 1, 2013.

#### **Hybrid Opt-In Election**

Eligible Plan 2 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014.

The Hybrid Retirement Plan's effective date for eligible Plan 2

#### **Eligible Members**

Employees are in the Hybrid Retirement Plan if their membership date is on or after January 1, 2014. This includes:

and any required fees.

- State employees\*
- Members in Plan 1 or Plan 2 who elected to opt into the plan during the election window held January 1-April 30, 2014; the plan's effective date for opt-in members was July 1, 2014

# \*Non-Eligible Members Some employees are not eligible to participate in the Hybrid Retirement Plan.

The Hybrid Retirement Plan's effective date for eligible Plan 1 members who opted in was July 1, 2014.

If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement Plan.

Members who were eligible for an optional retirement plan (ORP) and had prior service under Plan 1 were not eligible to elect the Hybrid Retirement Plan and remain as Plan 1 or ORP.

members who opted in was July 1, 2014.

If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement Plan.

Members who were eligible for an optional retirement plan (ORP) and have prior service under Plan 2 were not eligible to elect the Hybrid Retirement Plan and remain as Plan 2 or ORP.

Those employees eligible for an optional retirement plan (ORP) must elect the ORP plan or the Hybrid Retirement Plan. If these members have prior service under Plan 1 or Plan 2, they are not eligible to elect the Hybrid Retirement Plan and must select Plan 1 or Plan 2 (as applicable) or ORP.

#### **Retirement Contributions**

State employees, excluding state elected officials, and optional retirement plan participants, contribute 5% of their compensation each month to their member contribution account through a pre-tax salary reduction. Member contributions are taxdeferred until they are withdrawn as part of a retirement benefit or as a refund. The employer makes a separate actuarially determined contribution to VRS for all covered employees. VRS invests both member and employer contributions to provide funding for the future benefit payment.

#### **Retirement Contributions**

State employees contribute 5% of their compensation each month to their member contribution account through a pre-tax salary reduction.

#### **Retirement Contributions**

A member's retirement benefit is funded through mandatory and voluntary contributions made by the member and the employer to both the defined benefit and the defined contribution components of the plan. Mandatory contributions are based on a percentage of the employee's creditable compensation and are required from both the member and the employer. Additionally, members may choose to make voluntary contributions to the defined contribution component of the plan, and the employer is required to match those voluntary contributions according to specified percentages.

#### **Creditable Service**

Creditable service includes active service. Members earn creditable service for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional creditable service the member was granted. A member's total creditable service is one of the factors used to determine their eligibility for retirement and to calculate their retirement benefit. It also may count toward eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit.

#### Creditable Service

Same as Plan 1.

# Creditable Service <u>Defined Benefit Component:</u>

Under the defined benefit component of the plan, creditable service includes active service. Members earn creditable service for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional creditable service the member was granted. A member's total creditable service is one of the factors used to determine their eligibility for retirement and to calculate their retirement benefit. It also may count toward eligibility for the

health insurance credit in retirement, if the employer offers the health insurance credit.

#### <u>Defined Contributions</u> <u>Component:</u>

Under the defined contribution component, creditable service is used to determine vesting for the employer contribution portion of the plan.

#### **Vesting**

Vesting is the minimum length of service a member needs to qualify for a future retirement benefit. Members become vested when they have at least five years (60 months) of creditable service. Vesting means members are eligible to qualify for retirement if they meet the age and service requirements for their plan. Members also must be vested to receive a full refund of their member contribution account balance if they leave employment and request a refund.

Members are always 100% vested in the contributions that they make.

#### **Vesting**

Same as Plan 1.

# Vesting <u>Defined Benefit Component:</u>

Defined benefit vesting is the minimum length of service a member needs to qualify for a future retirement benefit. Members are vested under the defined benefit component of the Hybrid Retirement Plan when they reach five years (60 months) of creditable service. Plan 1 or Plan 2 members with at least five years (60 months) of creditable service who opted into the Hybrid Retirement Plan remain vested in the defined benefit component.

#### <u>Defined Contributions</u> <u>Component:</u>

Defined contribution vesting refers to the minimum length of service a member needs to be eligible to withdraw the employer contributions from the defined contribution component of the plan.

Members are always 100% vested in the contributions that they make.

Upon retirement or leaving covered employment, a member is eligible to withdraw a percentage of employer contributions to the defined contribution component of the plan, based on service. • After two years, a member is 50% vested and may withdraw 50% of employer contributions. • After three years, a member is 75% vested and may withdraw 75% of employer contributions. • After four or more years, a member is 100% vested and may withdraw 100% of employer contributions. Distribution is not required by law until age  $70\frac{1}{2}$ . **Calculating the Benefit Calculating the Benefit Calculating the Benefit** The Basic Benefit is calculated See definition under Plan 1. **Defined Benefit Component:** based on a formula using the See definition under Plan 1 member's average final compensation, a retirement **Defined Contribution** multiplier and total service **Component:** credit at retirement. It is one of The benefit is based on the benefit payout options contributions made by the available to a member at member and any matching contributions made by the retirement. employer, plus net investment earnings on those An early retirement reduction contributions. factor is applied to the Basic Benefit if the member retires with a reduced retirement benefit or selects a benefit payout option other than the Basic Benefit.

Average Final Compensation A member's average final compensation is the average of the 36 consecutive months of highest compensation as a covered employee.	Average Final Compensation A member's average final compensation is the average of their 60 consecutive months of highest compensation as a covered employee.	Average Final Compensation Same as Plan 2. It is used in the retirement formula for the defined benefit component of the plan.
Service Retirement Multiplier The retirement multiplier is a factor used in the formula to determine a final retirement benefit. The retirement multiplier for non-hazardous duty members is 1.70%.	Service Retirement Multiplier Same as Plan 1 for service earned, purchased or granted prior to January 1, 2013. For non-hazardous duty members the retirement multiplier is 1.65% for creditable service earned, purchased or granted on or after January 1, 2013.	Service Retirement Multiplier Defined Benefit Component: The retirement multiplier for the defined benefit component is 1.00%.  For members who opted into the Hybrid Retirement Plan from Plan 1 or Plan 2, the applicable multipliers for those plans will be used to calculate the retirement benefit for service credited in those plans.  Defined Contribution Component: Not applicable.
Normal Retirement Age Age 65.	Normal Retirement Age Normal Social Security retirement age.	Normal Retirement Age Defined Benefit Component: Same as Plan 2.  Defined Contribution Component: Members are eligible to receive distributions upon leaving employment, subject to restrictions.

#### Earliest Unreduced Retirement Eligibility

Age 65 with at least five years (60 months) of creditable service or at age 50 with at least 30 years of creditable service.

#### **Earliest Unreduced Retirement Eligibility**

Normal Social Security retirement age with at least five years (60 months) of creditable service or when their age and service equal 90.

#### Earliest Unreduced Retirement Eligibility Defined Benefit Component:

Normal Social Security retirement age and have at least five years (60 months) of creditable service or when their age and service equal 90.

# **Defined Contribution Component:**

Members are eligible to receive distributions upon leaving employment, subject to restrictions.

# **Earliest Reduced Retirement Eligibility**

Age 55 with at least five years (60 months) of creditable service or age 50 with at least 10 years of creditable service.

# **Earliest Reduced Retirement Eligibility**

Age 60 with at least five years (60 months) of creditable service.

#### Earliest Reduced Retirement Eligibility <u>Defined Benefit Component:</u>

Age Members may retire with a reduced benefit as early as age 60 with at least five years (60 months) of creditable service.

#### <u>Defined Contribution</u> <u>Component:</u>

Members are eligible to receive distributions upon leaving employment, subject to restrictions.

# Cost-of-Living Adjustment (COLA) in Retirement

The Cost-of-Living Adjustment (COLA) matches the first 3% increase in the Consumer Price Index for all Urban Consumers (CPI-U) and half of any additional increase (up to 4%) up to a maximum COLA of 5%.

#### **Eligibility:**

For members who retire with an unreduced benefit or with a reduced benefit with at least 20 years of creditable service, the COLA will go into effect on July 1 after one full calendar year from the retirement date.

For members who retire with a reduced benefit and who have less than 20 years of creditable service, the COLA will go into effect on July 1 after one calendar year following the unreduced retirement eligibility date.

## **Exceptions to COLA Effective Dates:**

The COLA is effective July 1 following one full calendar year (January 1 to December 31) under any of the following circumstances:

- The member is within five years of qualifying for an unreduced retirement benefit as of January 1, 2013.
- The member retires on disability.
- The member retires directly from short-term or long-term disability under the Virginia Sickness and Disability Program (VSDP).

## Cost-of-Living Adjustment (COLA) in Retirement

The Cost-of-Living Adjustment (COLA) matches the first 2% increase in the CPI-U and half of any additional increase (up to 2%), for a maximum COLA of 3%.

#### **Eligibility:**

Same as Plan 1

# **Exceptions to COLA Effective Dates:**

Same as Plan 1

# Cost-of-Living Adjustment (COLA) in Retirement Defined Benefit Component:

Same as Plan 2.

#### <u>Defined Contribution</u> <u>Component:</u>

Not applicable.

#### **Eligibility:**

Same as Plan 1 and Plan 2.

## Exceptions to COLA Effective Dates:

Same as Plan 1 and Plan 2.

- The member Is involuntarily separated from employment for causes other than job performance or misconduct and is eligible to retire under the Workforce Transition Act or the Transitional Benefits Program.
- The member dies in service and the member's survivor or beneficiary is eligible for a monthly death-in-service benefit. The COLA will go into effect on July 1 following one full calendar year (January 1 to December 31) from the date the monthly benefit begins.

#### **Disability Coverage**

Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.7% on all service, regardless of when it was earned, purchased or granted.

Most state employees are covered under the VSDP, and are not eligible for disability retirement.

VSDP members are subject to a one-year waiting period before becoming eligible for non-work-related disability benefits.

#### **Disability Coverage**

Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.65% on all service, regardless of when it was earned, purchased or granted.

Most state employees are covered under the VSDP, and are not eligible for disability retirement.

VSDP members are subject to a one-year waiting period before becoming eligible for non-work related disability benefits.

#### **Disability Coverage**

State employees (including Plan 1 and Plan 2 opt-ins) participating in the Hybrid Retirement Plan are covered under the VSDP, and are not eligible for disability retirement.

Hybrid members (including Plan 1 and Plan 2 opt-ins) covered under VSDP are subject to a one-year waiting period before becoming eligible for non-work-related disability benefits.

#### **Purchase of Prior Service**

Members may be eligible to purchase service from previous public employment, active duty military service, an eligible period of leave or VRS refunded service as creditable service in their plan. Prior creditable service counts toward vesting, eligibility for retirement and the health insurance credit. Only active members are eligible to purchase prior service. When buying service, members must purchase their most recent period of service first. Members also may be eligible to purchase periods of leave without pay.

# **Purchase of Prior Service** Same as Plan 1.

# Purchase of Prior Service Defined Benefit Component:

Same as Plan 1, with the following exceptions:

- Hybrid Retirement Plan members are ineligible for ported service.
- The cost for purchasing refunded service is the higher of 4% of creditable compensation or average final compensation.
- Plan members have one year from their date of hire or return from leave to purchase all but refunded prior service at approximate normal cost./ After that on-year period, the rate for most categories of service will change to actuarial cost.

#### <u>Defined Contribution</u> <u>Component:</u>

Not applicable.

#### **Contributions**

The contribution requirement for active employees is governed by §51.1-145 of the *Code of Virginia*, as amended, but may be impacted as a result of funding provided to state agencies by the Virginia General Assembly. Employees are required to contribute 5.00 percent of their compensation toward their retirement. Prior to July 1, 2012, the 5.00 percent member contribution was paid by the employer. Beginning July 1, 2012 state employees were required to pay the 5.00 percent member contribution and the employer was required to provide a salary increase equal to the amount of the increase in the employee-paid member contribution. Each state agency's contractually required contribution rate for the year ended lune 30, 2016 was 12.33 percent of covered employee compensation for employees in the VRS State Employee Retirement Plan for July 2015, 13.28 percent for August 2015 and 14.22 percent for September 2015 through June 2016. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2013. The actuarial rate for the VRS State Employee Retirement Plan was 15.80 percent. The actuarially determined rate, when combined with employee contributions, was expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Based on the provisions of §51.1-145 of the Code of Virginia, as amended, the contributions for the VRS State Employee Retirement Plan were funded at 78.02 percent of the actuarial rate for the year ended June 30, 2016. Additional funding provided by the General Assembly moved the contribution rate to 90 percent of the actuarial rate by September 2015 and for the remainder of FY 2016. Contributions from VA529 to the VRS State Employee Retirement Plan were \$964,499 and \$810,765 for the years ended June 30, 2016 and June 30, 2015, respectively.

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

At June 30, 2016, VA529 reported a liability of \$10,540,000 for its proportionate share of the VRS State Employee Retirement Plan Net Pension Liability. The Net Pension Liability was measured as of June 30, 2015 and the total pension liability used to calculate the Net Pension Liability was determined by an actuarial valuation as of that date. VA529's proportion of the Net Pension Liability was based on its actuarially determined employer contributions to the pension plan for the year ended June 30, 2015 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2015, VA529's proportion of the VRS State Employee Retirement Plan was 0.17215 percent as compared to 0.15817 percent at June 30, 2014.

For the year ended June 30, 2016, VA529 recognized pension expense of \$1,007,000 for the VRS State Employee Retirement Plan. Since there was a change in proportionate share between June 30, 2014 and June 30, 2015, a portion of the pension expense was related to deferred amounts from changes in proportion and from differences between employer contributions and the proportionate share of employer contributions.

At June 30, 2016, 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	\$76,000	
Net difference between projected and actual earnings on pension plan investments		\$758,000
Changes in proportion and differences between Employer contributions and proportionate share of contributions	793,000	<del>_</del>
Employer contributions subsequent to the measurement date	964,499	
Total	\$1,833,499	\$758,000

\$964,499 reported as deferred outflows of resources resulting from VA529's pension contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the Fiscal Year ending June 30, 2017. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in future reporting periods as follows:

#### Year ended June 30, 2016

FY 2017	\$45,000
FY 2018	33,000
FY 2019	(101,000)
FY 2020	134,000
FY 2021	-

#### **Actuarial Assumptions**

The total pension liability for the VRS State Employee Retirement Plan was based on an actuarial valuation as of June 30, 2014, 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, 2015.

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*

<sup>\*</sup> Administrative expenses as a percent of the market value of assets for the last experience study were found to be approximately 0.06 percent of the market assets

for all of the VRS plans. This would provide an assumed investment return rate for GASB purposes of slightly more than the assumed 7.0 percent. However, since the difference was minimal, and the lower 7.0 percent investment return assumption provided a projected plan net position that exceeded the projected benefit payments, the long-term expected rate of return on investments was assumed to be 7.0 percent to simplify preparation of pension liabilities.

#### Mortality rates:

#### **Pre-Retirement:**

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

#### Post-Retirement:

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

#### Post-Disablement:

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

The actuarial assumptions used in the June 30, 2014 valuation were based on the results of an actuarial experience study for the period from July 1, 2008 through June 30, 2012. Changes to the actuarial assumptions as a result of the experience study are as follows:

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

#### **Net Pension Liability**

The net pension liability (NPL) is calculated separately for each system and represents that particular system's total pension liability determined in accordance with GASB Statement No. 67, less that system's fiduciary net position. As of June 30, 2015, NPL amounts for the VRS State Employee Retirement Plan are as follows (amounts expressed in thousands):

State
<b>Employee</b>
Retirement
<u>Plan</u>

Total Pension Liability	\$ 22,531,130
Plan Fiduciary Net Position	<u>16,398,575</u>
Employers' Net Pension Liability (Asset)	\$ 6,122,555

Plan Fiduciary Net Position as a Percentage

of the Total Pension Liability 72.81 percent

The total pension liability is calculated by the System's actuary, and each plan's fiduciary net position is reported in the System's financial statements. The net pension liability is disclosed

in accordance with the requirements of GASB Statement No. 67 in the System's notes to the financial statements and required supplementary information.

#### Long-Term Expected Rate of Return

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

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

<sup>\*</sup> Using stochastic projection results provides an expected range of real rates of return over various time horizons. Looking at one year results produces an expected real return of 8.33 percent but also has a high standard deviation, which means there is high volatility. Over larger time horizons the volatility declines significantly and provides a median return of 7.44 percent, including expected inflation of 2.50 percent.

#### **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 System member contributions will be made per the VRS Statutes and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Through the fiscal year ending June 30, 2018, the rate contributed by VA529 for the VRS State Employee Retirement Plan will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly. From July 1, 2018 on, all agencies are assumed to contribute 100 percent of the actuarially determined contribution rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total pension liability.

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

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

	% Decrease (6.00%)				
VA529's proportionate	_				
share of the VRS State					
Employee Retirement Plan	\$ 15,139,000	\$	10,540,000	\$	6,684,000
Net Pension Liability					

#### Pension Plan Fiduciary Net Position

Detailed information about the VRS State Employee Retirement Plan's Fiduciary Net Position is available in the separately issued VRS Comprehensive Annual Financial Report. A copy of the VRS CAFR may be downloaded from the VRS website at <a href="http://www.varetire.org/publications/index.asp">http://www.varetire.org/publications/index.asp</a>, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

#### Payables to the Pension Plan

As of June 30, 2016 VA529 reported payables to the VRS State Employee Retirement Plan in the amount of \$67,120. This amount is largely comprised of payments due to the VRS that were not made until after the fiscal year end as a result of timing of payroll payment dates. Additional information regarding the VA529's pension liability can be found in the Required Supplementary Information section of this report.

#### 11. 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 a co-location agreement 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.

#### 12. SOAR Virginia

VA529's Board approved the creation and funding of SOAR Virginia® as a pilot program in fiscal 2010. In June 2015, SOAR became a permanent program of VA529. 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.

The Board approved initial funding of \$2 million per fiscal year beginning in 2011 and continuing through 2014 into an inVEST account in the name of VA529 for the development of the pilot program. As of June 30, 2015, \$8 million had been deposited in the SOAR account. 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, 2016, the SOAR Virginia account had a balance of \$8.3 million. During fiscal year 2016 \$180,458 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, 2016 are shown below.

Number of	Award Amounts Allocated to Enrolled Students	Additional Awards Enrolled Students May Receive	Total SOAR Commitment
Students Enrolled (1) 2,658	\$1,489,451	\$3,256,000	\$4,745,451

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

#### 13. Scholarship Program And Promotional Accounts

The VA529 scholarship program consists of prePAID and inVEST 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 prePAID and inVEST 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 prePAID or inVEST 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, 2016:

	Scholarship		Promo	otional
Program	Accounts	Value	Accounts	Value
inVEST	247	\$927,522	221	\$1,009,800
prePAID	24	\$392,570	18	\$277,647

prePAID value represents the cancellation value of accounts at June 30, 2016 in VEST value represents the aggregate market value of the investments in the portfolios at June 30, 2016

#### 14. 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 2016 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 2016 after it receives all Schedule K-1s at the end of calendar 2016.



# Required Supplementary Information





#### VA529 Pension Liability Required Supplementary Information

Schedule of VA529's Share of Net Pension Liability VRS State Employee Retirement Plan For the Vegra Ended Lyne 20, 2016 and 2015*		
For the Years Ended June 30, 2016 and 2015*	2016	2015
VA529's Proportion of the Net Pension Liability (Asset)	0.17215%	0.15817%
VA529's Proportionate Share of the Net Pension Liability (Asset)	\$10,540,000	\$8,855,000
VA529's Covered Payroll	\$6,716,544	\$6,188,569
VA529's Proportionate Share of the Net Pension Liability (Asset)		
as a Percentage of its Covered Payroll	156.93%	143.09%
Plan Fiduciary Net Position as a Percentage	72.81%	74.28%
of the Total Pension Liability	72.0170	74.20%
Schedule is intended to show information for 10 years. Since 2016 is th	he second	
year for this presentation, only one additional year of data is available	e. However,	
additional years will be included as they become available.		
* The amounts presented have a measurement date of the previous fisc	cal vear end.	

Schedul	e of V	A529 Contril	outior	ıs				
<b>VRS Stat</b>	e Emp	loyee Retire	ment	Plan				
For the '	Years l	Ended June 3	<b>30, 20</b>	15 through 2	2016			
Contributions in Relation to Contractually Contractually Contril Required Required Defici					ribution cciency ccess)	mployer's Covered Payroll	Contributions as a % of Covered Payroll	
Date		(1)		(2)		(3)	(4)	(5)
2016	\$	964,499	\$	964,499	\$	-	\$ 7,061,526	13.66%
2015	\$	810,765	\$	810,765	\$	-	\$ 6,716,544	12.07%

#### Notes to Required Supplementary Information For the Year Ended June 30, 2016

**Changes of benefit terms –** There have been no actuarially material changes to the System benefit provisions since the prior actuarial valuation. The 2014 valuation includes Hybrid Retirement Plan members for the first time. The hybrid plan applies to most new employees hired on or after January 1, 2014 and not covered by enhanced hazardous duty benefits. Because this was a new benefit and the number of participants was relatively small, the impact on the liabilities as of the measurement date of June 30, 2015 are not material.

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

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

**GASB Statement No. 82** *Pension Issues-An Amendment of GASB Statements No. 67, No. 68 and No. 73* – GASB Statement No. 82, effective for reporting periods beginning after June 15, 2016, revises the definition for covered payroll as included in GASB Statement No. 68. This definition defines covered payroll as the payroll on which contributions to a pension plan are based. VA529 early implemented this standard and accordingly the amounts included for covered payroll above were calculated in accordance with the definition in GASB Statement No 82.



# Supplementary Information





#### **APPENDIX A**

#### **Mutual Funds by Program**

#### Virginia529 prePAID<sup>SM</sup>

Aberdeen Asset Management, Inc. BlackRock, Inc. Capital Research & Management Co.

Dimensional Fund Advisors, LP Stone Harbor Investment Partners LP Templeton Institutional Funds, Inc.

The Vanguard Group, Inc.

**Emerging Market Equity Fund** T-Fund (Cash and Equivalents) American Funds EuroPacific Growth **Emerging Markets Core Equity Emerging Market Debt Blend** 

Templeton International Equity Series

Institutional Index Fund

#### Virginia529 inVEST<sup>SM</sup>

Aberdeen Asset Management, Inc. Capital Research & Management Co. Dimensional Fund Advisors, LP

Templeton Institutional Funds, Inc.

Morgan Stanley Investment Management, Inc.

**Parnassus Investments** 

Stone Harbor Investment Partners LP The Vanguard Group, Inc.

The Vanguard Group, Inc. The Vanguard Group, Inc.

The Vanguard Group, Inc. The Vanguard Group, Inc.

The Vanguard Group, Inc. The Vanguard Group, Inc. The Vanguard Group, Inc.

The Vanguard Group, Inc. The Vanguard Group, Inc. **Emerging Market Equity Fund** 

American Funds EuroPacific Growth **Emerging Markets Core Equity** 

**Templeton International Equity Series** Institutional Global Real Estate Fund

Core Equity Fund

**Emerging Markets Debt Fund** Institutional Index Fund Small Cap Index Fund LifeStrategy Growth Fund

LifeStrategy Moderate Growth Fund

LifeStrategy Income Fund Total Stock Market Index Fund Total Bond Market Index Fund

Total International Stock Index Fund Inflation-Protected Securities Fund

**REIT Index Fund** 

#### **APPENDIX B**

#### Separate Account, Commingled Fund & Alternative Managers by Program

#### Virginia529 prePAID<sup>SM</sup>

#### **Investment Manager**

Adams Street Partners
Advent Capital Management, LLC
Aether Investment Partners, LLC

Aurora Investment Management, LLC

Commonfund BlackRock, Inc.

Brookfield Investment Management, Inc.\*

Donald Smith & Co. Ferox Capital, LLP

Harmonic Capital Partners Invesco Advisers, Inc. Private Advisors, LLC

Prudential Investment Management, Inc. Shenkman Capital Management, Inc.

State Street Global Advisors

Thompson, Siegel & Walmsley, LLC

**UBS Realty Investors, LLC** 

Wellington Management Co., LLP Westfield Capital Management Co., LP

#### **Investment Strategy**

Private Equity Fund of Funds Convertible Fixed Income Private Equity Fund of Funds

Market Neutral Hedge Fund of Funds

Private Equity Fund of Funds
Intermediate Corporate Bonds
Mortgage-Backed Securities

Small Cap Value Domestic Equity

Convertible Fixed Income Global Macro Hedge Fund Stable Value Fixed Income Private Equity Fund of Funds High Yield Fixed Income Senior Secured Bank Loans

**Indexed US Inflation Protected Securities** 

SMID Cap Value Domestic Equity

Private Real Estate Emerging Market Debt

Mid Cap Growth Domestic Equity

#### Virginia529 inVEST<sup>SM</sup>

#### **Investment Manager**

Invesco Advisers, Inc.

Prudential Investment Management, Inc.

Rothschild Asset Management, Inc.

#### **Investment Strategy**

Stable Value Fixed Income High Yield Fixed Income SMID Cap Value Domestic Equity

<sup>\*</sup>In May 2016, Brookfield announced that Schroder Investment Management would acquire Brookfield's securitized products investment management business and team. The transaction was completed in September 2016.

# Appendix C Investment Details by Program as of June 30, 2016 Virginia 529 prePAID<sup>SM</sup>

	8			% of Total
Investment Manager	Asset Class	Mutual Fund(s) (if applicable)	Aggregate Fair Value <sup>3</sup>	Fund <sup>1</sup>
Equities				
Aberdeen Asset Management, Inc.	Emerging Market	Emerging Market Equity	\$ 131,259,704	5.5%
Capital Research & Management Co.	International Core	American Funds EuroPacific Growth	115,494,345	4.8%
Dimensional Fund Advisors, LP	Emerging Market	<b>Emerging Markets Core Equity</b>	58,670,101	2.4%
Donald Smith & Co.	Small Cap Value	N/A	58,854,105	2.4%
Templeton Institutional Funds, Inc.	International Value	Templeton International Equity Series	114,084,202	4.7%
The Vanguard Group, Inc.	Large Cap Domestic Blend	Institutional Index	124,775,762	5.2%
Thompson, Siegel & Walmsley, LLC	Small/Mid Cap Value	N/A	78,894,310	3.3%
Westfield Capital Management Co., LP	Mid Cap Growth	N/A	100,603,577	4.2%
Total Equities			782,636,107	32.6%
Core Fixed Income				
BlackRock, Inc.2	Cash Equivalents	T-Fund	5,782,165	0.2%
BlackRock, Inc.	Intermediate Corporate Bonds	N/A	71,594,491	3.0%
Brookfield Investment Management, Inc.	Mortgage-Backed Securities	N/A	73,258,801	3.0%
Invesco Advisers, Inc. <sup>3</sup>	Stable Value	N/A	118,225,252	4.9%
Shenkman Capital Management, Inc.	Senior Secured Bank Loans	N/A	226,552,064	9.4%
State Street Global Advisors	Inflation Protected Securities	N/A	119,809,099	5.0%
Treasurer of Virginia	Cash Equivalents	N/A	592,115	0.0%
VA529 Transition Account	N/A	N/A	709,348	0.0%
Total Core Fixed Income			616,523,336	25.7%
Non-Core Fixed Income				
Advent Capital Management, LLC	Convertible Bonds	N/A	100,974,762	4.2%
Ferox Capital, LLP	Convertible Bonds	N/A	70,141,757	2.9%
Prudential Investment Management, Inc.	High Yield Bonds	N/A	235,508,930	9.8%
Stone Harbor Investment Partners LP	Emerging Markets Debt Blend	Emerging Markets Debt & Local Markets	67,498,686	2.8%
Wellington Management Co., LLP	Emerging Markets Debt	N/A	187,878,941	7.8%
Total Non-Core Fixed Income		·	662,003,077	27.6%
Alternative Investments				
Adams Street Partners	Private Equity Fund of Funds	N/A	64,611,140	2.7%
Aether Investment Partners, LLC	Private Equity Fund of Funds	N/A	8,668,239	0.4%
Aurora Investment Management, LLC	Hedge Fund of Funds	N/A	44,036,976	1.8%
Aventura Holdings, LLC	Private Real Estate	N/A	8,024,850	0.3%
Commonfund	Private Equity Fund of Funds	N/A	9,629,298	0.4%
Harmonic Capital Partners	Hedge Fund	N/A	90,658,667	3.8%
Private Advisors, LLC	Private Equity Fund of Funds	, N/A	31,377,958	1.3%
UBS Realty Investors, LLC	Private Real Estate	N/A	84,075,808	3.5%
Total Alternative Investments		•	341,082,936	14.2%
Grand Total			\$ 2,402,245,456	100.0%

<sup>&</sup>lt;sup>1</sup>May not sum to 100% due to rounding. <sup>2</sup>BlackRock, Inc. operating cash in the amount of \$27,819,429 is not included in the total above. <sup>3</sup>Stable value assets shown at contract value.

#### Investment Details by Program as of June 30, 2016 Virginia529 inVEST<sup>SM</sup>

Investment Manager	Asset Class	Mutual Fund (if applicable)	Aggregate Fair Value <sup>1</sup>
Age-Based and Actively Managed Static Balance	d Portfolios		
Aberdeen Asset Management, Inc.	<b>Emerging Markets Equity</b>	Emerging Market Equity Fund	\$ 57,289,951
Capital Research & Management Co.	International Core Equity	American Funds EuroPacific Growth	108,295,485
Dimensional Fund Advisors, LP	Emerging Market	Emerging Markets Core Equity	57,106,967
Templeton Institutional Funds, Inc.	International Value Equity	Templeton International Equity Series	108,364,990
Invesco Advisers, Inc.	Stable Value	N/A	786,441,597
Morgan Stanley Investment Management, Inc.	Global REITs	Institutional Global Real Estate Fund	121,071,605
Prudential Investment Management, Inc.	High Yield Bonds	N/A	92,944,223
Rothschild Asset Management	Small/Mid Cap Domestic Equity	N/A	65,346,816
Stone Harbor Investment Partners LP	Emerging Markets Debt	Emerging Market Debt Fund	178,172,807
The Vanguard Group, Inc.	Intermediate Core Fixed Income	Total Bond Market Index Fund	306,572,190
The Vanguard Group, Inc.	Large-Cap Domestic Equity Blend	Institutional Index Fund	215,689,188
The Vanguard Group, Inc.	Small Cap Domestic Equity Blend	Small Cap Index Fund	48,281,595
Total Age-Based Evolving Portfolios			2,145,577,414
Static Portfolios			
Parnassus Investments	Socially Responsible Large Cap Core Equity	Core Equity Fund	31,961,901
The Vanguard Group, Inc.	80% Equities 20% Fixed Income	LifeStrategy Growth Fund	411,186,350
The Vanguard Group, Inc.	60% Equities 40% Fixed Income	LifeStrategy Moderate Growth Fund	190,792,825
The Vanguard Group, Inc.	20% Equities 80% Fixed Income	LifeStrategy Income Fund	63,195,492
The Vanguard Group, Inc.	Inflation Protected Securities	Inflation-Protected Securities Fund	22,275,560
The Vanguard Group, Inc.	Real Estate Investment Trust	REIT Index Fund	53,236,364
The Vanguard Group, Inc.	Intermediate Core Fixed Income	Total Bond Market Index Fund	34,026,674
The Vanguard Group, Inc.	International Equity	Total International Stock Index Fund	66,612,513
The Vanguard Group, Inc.	Domestic Equity Blend	Total Stock Market Index Fund	310,433,174
Total Static Portfolios			1,183,720,853
Grand Total			\$ 3,329,298,267

Cash held with Wells Fargo as well as with BNY Mellon (custodian) in the amount of \$5,721,791 is not included in the total above.



# Other Information





## **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 American Funds through February 15, 2040.

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, 2016, approximately 2.20 million unique active accounts were open with net assets in excess of \$50.7 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.

As of June 30, 2016, 41 American Funds mutual funds were approved by VA529 and available through the program. Two additional funds are approved but yet to be available for investment. A complete list of approved and available funds is shown in the tables on the following pages.

During the fiscal year the Board approved the addition of three American Funds mutual funds. In December 2015 the Board approved the addition of the American Funds Strategic Bond Fund. This fund was available to investors in March 2016 and ended the fiscal year with approximately \$2.5 million in assets. The Board approved the addition of the American Funds Corporate Bond Fund and American Funds Emerging Markets Bond Fund in October 2015 and February 2016, respectively. These funds both became available to investors after fiscal year end.

A separate audited report for each of the 41 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, 2016 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)

Sas Share Chass Not house as of hard hour hour black (assums and	nares in thousands)		Fiscal
<u>Fund</u>	Shares	Net Assets	Year End
Growth funds	<b>-</b> 4 000	<b>* 1 = 11</b> 000	20 100 11 6
AMCAP Fund®	71,823	\$ 1,711,000	02/29/16
EuroPacific Growth Fund®	36,496	1,591,516	03/31/16
The Growth Fund of America®	184,195	7,834,357	08/31/15
The New Economy Fund®	15,968	608,441	11/30/15
New Perspective Fund®	56,271	1,983,585	09/30/15
New World Fund®	18,620	943,786	10/31/15
SMALLCAP World Fund®  Growth-and-income funds	30,963	1,359,478	09/30/15
American Mutual Fund®	27 105	000 026	10/21/15
	27,195	980,826	10/31/15
Capital World Growth and Income Fund®	86,631 3,010	3,912,676	11/30/15
American Funds Developing World Growth and Income Fund <sup>™</sup> Fundamental Investors®	47,766	26,140 2,418,992	11/30/15 12/31/15
International Growth and Income Fund <sup>SM</sup>	5,633	179,904	06/30/15
The Investment Company of America®	83,255	2,770,852	12/31/15
Washington Mutual Investors Fund <sup>SM</sup>	62,248	2,442,727	04/30/16
Equity-income funds	02,240	2,442,727	04/30/10
Capital Income Builder®	52,717	3,054,271	10/31/15
The Income Fund of America®	98,652	2,096,026	07/31/15
Balanced funds	70,032	2,070,020	07/31/13
American Balanced Fund®	170,765	4,063,305	12/31/15
American Funds Global Balanced Fund <sup>SM</sup>	10,209	302,303	10/31/15
Bond funds	10,203	502,500	10/01/10
American High-Income Trust®	46,991	462,087	09/30/15
American Funds Inflation Linked Bond Fund®	350	3,298	11/30/15
The Bond Fund of America®	108,086	1,361,101	12/31/15
Capital World Bond Fund®	26,354	505,531	09/30/15
Intermediate Bond Fund of America®	38,984	527,378	08/31/15
Short-Term Bond Fund of America®	43,272	430,693	08/31/15
American Funds Strategic Bond Fund <sup>SM</sup>	N/A	N/A	12/31/16
U.S. Government Securities Fund®	14,680	206,697	08/31/15
American Funds Mortgage Fund®	2,462	25,119	08/31/15
Money market fund			
American Funds U.S. Government Money Market Fund <sup>SM</sup>	1,235,809	1,236,010	09/30/15
American Funds College Target Date Series funds			
American Funds College 2018 Fund®	68,803	763,563	10/31/15
American Funds College 2021 Fund®	68,121	777,109	10/31/15
American Funds College 2024 Fund®	56,961	670,893	10/31/15
American Funds College 2027 Fund®	42,318	517,594	10/31/15
American Funds College 2030 Fund®	46,855	593,911	10/31/15
American Funds College 2033 Fund <sup>SM</sup>	5,477	54,151	10/31/15
American Funds College Enrollment Fund®	42,123	421,199	10/31/15
American Funds Portfolio Series <sup>SM</sup> funds	10.0=0	100 = 10	10/01/15
American Funds Global Growth Portfolio <sup>SM</sup>	13,278	192,562	10/31/15
American Funds Growth Portfolio <sup>SM</sup>	26,909	412,895	10/31/15
American Funds Growth and Income Portfolio <sup>SM</sup>	31,593	424,036	10/31/15
American Funds Balanced Portfolio <sup>SM</sup>	22,302	298,654	10/31/15
American Funds Income Portfolio <sup>SM</sup>	11,113	128,077	10/31/15
American Funds Preservation Portfolio <sup>SM</sup>	9,383	93,285	10/31/15

Data compiled from American Funds audited fund statements

CollegeAmerica
529 Share Class Net Assets as of June 30, 2016 (dollars and shares in thousands)

Fund	Shares	Net Assets
Growth funds		
AMCAP Fund®	72,888	\$ 1,841,985
EuroPacific Growth Fund®	36,053	1,565,037
The Growth Fund of America®	197,344	8,012,658
The New Economy Fund®	17,007	568,791
New Perspective Fund®	59,268	2,064,799
New World Fund®	18,120	913,978
SMALLCAP World Fund®	32,496	1,372,387
Growth-and-income funds		
American Mutual Fund®	28,515	1,033,573
Capital World Growth and Income Fund®	87,295	3,784,348
American Funds Developing World Growth and Income FundSM	3,507	31,803
Fundamental Investors®	48,263	2,504,686
International Growth and Income Fund <sup>SM</sup>	5,816	161,465
The Investment Company of America®	82,460	2,914,850
Washington Mutual Investors Fund <sup>SM</sup>	62,187	2,485,859
Equity-income funds		
Capital Income Builder®	52,817	3,104,795
The Income Fund of America®	99,197	2,100,296
Balanced funds		
American Balanced Fund®	175,125	4,308,896
American Funds Global Balanced Fund <sup>SM</sup>	10,583	314,494
Bond funds		
American High-Income Trust®	45,891	452,032
American Funds Inflation Linked Bond Fund®	556	5,439
The Bond Fund of America®	109,861	1,441,383
Capital World Bond Fund®	24,975	504,507
Intermediate Bond Fund of America®	40,840	559,519
Short-Term Bond Fund of America®	45,605	455,931
U.S. Government Securities Fund®	15,925	227,247
American Funds Strategic Bond Fund <sup>SM</sup>	244	2,508
American Funds Mortgage Fund®	3,200	32,970
Money market fund		
American Funds U.S. Government Money Market Fund <sup>SM</sup>	1,447,863	1,447,864
American Funds College Target Date Series funds		
American Funds College 2018 Fund®	84,765	926,331
American Funds College 2021 Fund®	88,687	1,005,853
American Funds College 2024 Fund®	74,608	864,446
American Funds College 2027 Fund®	55,141	662,577
American Funds College 2030 Fund®	61,146	757,884
American Funds College 2033 Fund <sup>sM</sup>	15,577	153,008
American Funds College Enrollment Fund®	44,334	445,863
American Funds Portfolio Series™ funds		
American Funds Global Growth Portfolio <sup>SM</sup>	15,390	210,204
American Funds Growth Portfolio <sup>SM</sup>	33,721	492,028
American Funds Growth and Income Portfolio <sup>SM</sup>	36,395	480,650
American Funds Balanced Portfolio <sup>SM</sup>	25,267	334,428
American Funds Income Portfolio <sup>SM</sup>	12,043	141,109
American Funds Preservation Portfolio <sup>SM</sup>	12,057	121,387
Total Assets		\$50,809,866

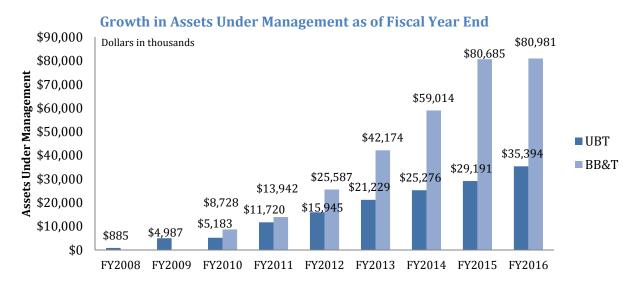
Data compiled from American Funds reports. Figures may not sum foot due to rounding.

# **CollegeWealth®**

CollegeWealth is VA529's FDIC-insured defined contribution 529 college savings program, provided in partnership with two participating financial institutions; BB&T and Union Bank & Trust. Each CollegeWealth college savings account with a value up to \$250,000 (when combined with any other holdings of an individual at any one bank) is insured by the FDIC. CollegeWealth began in the autumn of 2007 with Union Bank & Trust (UBT) 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. The partnership made CollegeWealth available throughout Virginia and across the country. As of June 30, 2016 there were 18,169 unique active accounts with net assets in excess of \$116.3 million. 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.

Since its inception, the CollegeWealth program has continued to grow. The charts below provide details on the growth in the number of accounts and assets for the program.





# **VIRGINIA COLLEGE SAVINGS PLAN**

N. Chesterfield, Virginia

## **BOARD MEMBERS**

As of June 30, 2016

Mr. Shawn P. McLaughlin, Chairman

Mr. John D. Whitlock, Vice Chairman

Dr. Edward H. Bersoff

Mr. Peter A. Blake

Dr. Glenn DuBois

Ms. Manju Ganeriwala

Mr. William S. Jaisen

Mr. Reggie Samuel

Mr. Timothy J. Sullivan

Mr. Peter M. Vogt

Mr. David A. Von Moll

# **CHIEF EXECUTIVE OFFICER**

Ms. Mary G. Morris

# **Committee Assignments**

As of June 30, 2016

#### **Audit and Actuarial Committee:**

# **Board Members:**

**Non-Board Member:** 

Phil Leone

John D. Whitlock, Chairman David A. Von Moll, Vice Chairman Dr. Edward H. Bersoff Peter A. Blake

Manju Ganeriwala Shawn P. McLaughlin

Donna M. VanCleave, permanent designee for G. DuBois

Peter M. Vogt

# **Compensation Committee:**

#### **Board Members:**

Dr. Edward H. Bersoff, Chairman Donna M. VanCleave, Vice Chairperson Shawn P. McLaughlin Reggie Samuel Timothy J. Sullivan

## **Investment Advisory Committee:**

## **Board Members:**

Manju Ganeriwala William S. Jasien Shawn P. McLaughlin Reggie Samuel David A. Von Moll

#### **Non-Board Members:**

Ronald L. Tillett, Chairman Christopher J. Dion, Vice Chairman W. Massie Meredith, Jr. Liza Scott

#### **Ex Officio:**

Mary G. Morris Gary Ometer

# **Attachment B**

Actuarial Valuation Report

Virginia529 prePAID Program

for the year ended June 30, 2016

ACTUARIAL VALUATION
OF THE
VIRGINIA529 prePAID
AS OF JUNE 30, 2016

By:

ALAN H. PERRY, FSA, CFA RICHARD L. GORDON, FSA, EA JILL M. STANULIS, EA



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January 13, 2017

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 Virginia529 prePAID Program as of June 30, 2016.

## Purpose

The main purposes of this report are:

- to calculate the actuarial present value of the obligations under the prepaid tuition contracts purchased through June 30, 2016 and compare the value of those obligations with the assets in prePAID 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 prePAID 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 prePAID at the end of a biennium shall remain in prePAID. Interest and income earned from the investment of such funds shall remain in prePAID.

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 prePAID, 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 prePAID obligations, and the General Assembly has included the provision in subsequent Appropriation Acts, including Chapter 780 of the 2016 Virginia Acts of Assembly (2016 Appropriation Act).

# Program Design

The Virginia529 prePAID is one of four Section 529 options offered by the Virginia College Savings Plan. Under prePAID, 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 the Virginia529 inVEST Program and other savings programs, contract holders have the option of rolling over the value of their prePAID contract into a savings account. The value of the prePAID 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.

# **Statutory Requirements**

The Code of Virginia, Title 23.1, Subtitle II, Chapter 7 provides limited guidance for establishing the actuarial basis to evaluate prePAID. The Code requires an annual audit of prePAID and states in part that if the annual accounting and audit reveal that there are insufficient funds to ensure the "actuarial soundness" of prePAID, 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 the Virginia529 prePAID, 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 the Virginia529 prePAID. On June 21, 2016 the Board reviewed the allocation strategy and recommended no changes to the allocation.

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 prePAID investments will be allocated as shown below, based on the investment policy target allocations:

# Asset Category

Equities	32.5%
Core Fixed Income	25.0%
Non-Core Fixed Income	27.5%
Alternative Investments	15.0%

# **Actuarial Assumptions**

The actuarial assumptions used to prepare this report are summarized in <u>Appendix C</u>. 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 6.25% 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>	Community Colleges				
Fall 2017 and Fall 2018	5.0%	5.0%				
Fall 2019 and thereafter	6.5%	6.5%				

The tuition growth assumptions are lower than the prior year's report of 6.5% per year for both community colleges and universities in all years.

# Summary of Results

The actuarial value of the obligations of the Virginia529 prePAID as of June 30, 2016 is summarized below and compared with the total assets of prePAID.

	Present Value of Obligations For Future <u>Payments</u>	Value of Total prePAID <u>Assets</u>	Actuarial Reserve/ (Deficit)
		(Amounts in Million	ns)
Virginia529 prePAID:			
Tuition Obligations	\$2,010.0	n/a	n/a
Administrative Expenses	<u>25.6</u>	<u>n/a</u>	<u>n/a</u>
Grand Total	\$2,035.6	\$2,625.3	\$589.7

As indicated above, the Virginia529 prePAID has assets that exceed the "best estimate" of the obligations by roughly \$589.7 million or 29.0%. Unfavorable future experience would adversely affect this position. It would be desirable to maintain and accumulate additional actuarial reserve over time to protect and strengthen 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, 2016) until all tuition benefits have been paid and the expenses associated with making those payments. It does not include the future expenses of prePAID associated with general overhead and marketing attributable to future contracts. The \$25.6 million administrative expense obligation is equivalent to about \$394 per contract.

## Actuarial Gain/Loss Analysis

During the 2016 fiscal year, the actuarial reserve position of prePAID improved from a surplus of \$546.4 million to a surplus of \$589.7 million or 29.0% of obligations. Actuarial gains add to the reserve while actuarial losses decrease the reserve. This year's increase to the reserve is mostly attributable to lower than expected tuition increases and changes to the economic assumptions offset by lower than expected investment returns. 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 \$34.2 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 prePAID investments (net of investment management fees) for the fiscal year was 0.10% on a time-weighted basis and -0.03% on a dollar-weighted basis. For the previous valuation, a 6.25% rate of return was assumed. This produced a net actuarial loss of approximately \$152.3 million.

The enrollment-weighted average university tuition and mandatory fee amount for the 2016-2017 school year increased by 4.8%, 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 3.2%, a smaller increase than the 6.5% rate assumed in the prior valuation. These smaller increases resulted in an actuarial gain of \$21.0 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 0.10% (6.15% less than the 6.25% assumption). The lower than expected actual account balances resulted in an actuarial gain of approximately \$6.1 million.

The Plan sold 3,561 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 \$10.4 million from these new contracts.

prePAID received \$48.7 million in administrative fee revenue from all the Plan programs, including CollegeAmerica. Total agency operating expenses were \$20.0 million, of which \$6.2 million was expected to be provided by the prePAID program. The balance of the fee revenue, \$34.9 million, is an increase to the reserve.

The tuition growth assumption for both Universities and Community Colleges was lowered from 6.5% per year in all years to 5.0% for the fall of 2017 and the fall of 2018 and 6.5% each year thereafter. This increased the reserve by \$30.8 million.

The assumption for the reasonable rate was changed from 3.75% in all years to 0.16% for 2016-2017, 1.25% for 2017-2018, 2.25% for 2018-2019 and 3.25% thereafter. The volatility and correlation assumptions for the investment returns and tuition increases were updated. The combined impact of these changes was a \$37.0 million increase to the reserve.

Other experience gains added about \$21.2 million to the reserve. These could be from rollovers, cancellations, forfeitures, or more beneficiaries attending colleges with lower tuition levels than assumed in last year's valuation or 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, 2015	\$ 546.4
Interest on the reserve at 6.25% Investment gain / (loss) Tuition gain / (loss) Lower than expected actual account balances Sales of new contracts Administrative fee revenue from Virginia529 Change in tuition growth assumptions Change in reasonable rate and other assumptions Other experience gains	34.2 (152.3) 21.0 6.1 10.4 34.9 30.8 37.0 21.2
Actuarial Reserve / (Deficit) as of June 30, 2016	\$ 589.7

# 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.

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 prePAID 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 the Virginia529 prePAID.

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	ΛΛil	lio	ne)
(Amounts	III	IVIII	IΙΟ	บรา

Percentage of "Best Estimate" Reserve	Total prePAID Fund Value at June 30, 2016	Probability of prePAID Funds Exceeding Obligation
80%	\$1,628.5	6%
90%	1,832.0	23%
100%	2,035.6	50%
110%	2,239.1	75%
120%	2,442.7	90%
129%	2,625.3	96%*
130%	2,646.2	96%
140%	2,849.8	99%
150%	3,053.3	99%

<sup>\*</sup>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 prePAID fund balance at June 30, 2016 of \$2,625.3 million is 129.0% of the actuarially determined "Best Estimate" Reserve amount of \$2,035.6 million. As indicated in the above table, this prePAID fund balance is estimated to have a 96% probability of being adequate to satisfy all prePAID 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 and Community College tuition increase 5.0% for each of the next two years and then 6.5% per year thereafter, and prePAID assets earn 5.92% each year. The starting Market Value of Invested Assets as of July 1, 2016 is \$2,426.6 million. At the end of the 2041 Fiscal Year all tuition obligations associated with contracts already purchased are expected to have been paid resulting in a final cumulative surplus of \$2,484.0 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 prePAID have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of prePAID and reasonable expectations). Further, the actuarial assumptions in the aggregate are reasonable and are related to the experience of prePAID and to reasonable expectations. The following actuarial assumptions were set by the Virginia College Savings Plan:

- 1) the investment return assumption of 6.25% per year, and;
- 2) the tuition growth assumption for universities of 5.0% in Fall 2017 and Fall 2018 and 6.5% per year thereafter and the tuition growth assumption for community colleges of 5.0% for Fall 2017 and Fall 2018 and 6.5% per year thereafter.

# Certification

Based on the foregoing assumptions, the Virginia529 prePAID 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 prePAID 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

Richal I Yada

Member American Academy of Actuaries

Richard L. Gordon, FSA, EA

JUM Sames

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Jill M. Stanulis, EA

Member American Academy of Actuaries

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# I. Statement of Assets as of June 30, 2016

	Investments	Market Value				
1)	Equities	\$ 1,026,253,384				
2)	Fixed Income including Accrued Interest	1,237,532,010				
3)	REIT Fund and Real Estate	91,475,811				
4)	Cash & Cash Equivalents	77,209,875				
5)	Prepaid Assets	147,190				
6)	Property & Equipment	8,701,688				
7)	Accounts Receivable	11,852,500				
8)	Other Receivables	4,337,784				
9)	Accounts Payable	(971,193)				
10)	Other Payables	(754,327)				
11)	Deferred Outflow	1,833,499				
12)	Deferred Inflow	(758,000)				
13)	Accrued Liabilities	(30,301,150)				
	Total Market Value of Investments	\$ 2,426,559,071				
	Present Value of Installment Contract Receivables	<u>198,758,778</u>				
	Value of Total Fund Assets	\$ 2,625,317,849				
	II. Reconciliation of Investments					
1)	Market Value of Investments at June 30, 2015	\$ 2,453,881,985				
2)	Contract Purchase Payments	108,654,635				
3)	Application Fees	115,391				
4)	Administrative Fee Revenue	48,714,936				
5)	Interest and Dividends	62,891,444				
6)	Realized and Unrealized Gains/(Losses)	(53,909,300)				
7)	Tuition Benefits Paid	(119,492,541)				
8)	Refunds Paid	(11,564,086)				
9)	Net Rollovers	(31,060,207)				
10)	Administrative Expenses	(20,024,429)				
11)	Investment Management Fees	(8,177,649)				
12)	Net Transfers to the Commonwealth	(415,045)				
13)	Net Effect of Changes in Accruals of Assets and Liabilities	(3,056,063)				
14)	Market Value of Investments at June 30, 2016	\$ 2,426,559,071				
	Time-weighted rate of return 0.10% Dollar-weighted rate of return -0.03%					

# Appendix A

Virginia529 prePAID

Contract Data as of June 30, 2016 – Contracts Purchasing Tier I Units Only - Number of Contracts\*

[	Total Years of Community College Purchased											
				Total by	Percent							
Matriculation	0	0	0	0	0	0	0	0	0	0	Payout	of
Year	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	Year	Total
2000-2001	0	11	0	3	0	11	0	221	01	1	28	0.0%
2001-2002	0	3	0	2	0	0	0	36	0	2	43	0.1%
2002-2003	0	10	0	5	0	0	0	45	0	6	66	0.1%
2003-2004	0	3	0	8	0	1	0	70	0	1	83	0.1%
2004-2005	0	12	0	13	0	2	0	99	0	7	133	0.2%
2005-2006	0	20	0	27	0	4	0	181	0	12	244	0.4%
2006-2007	0	27	0	34	0	16	0	251	0	26	354	0.6%
2007-2008	0	34	0	54	0	10	0	298	0	26	422	0.7%
2008-2009	0	48	0	55	0	16	0	425	0	39	583	1.0%
2009-2010	0	58	0	64	0	24	0	559	0	48	753	1.3%
2010-2011	0	79	0	100	0	23	0	621	0	75	898	1.5%
2011-2012	0	90	0	103	0	29	0	819	0	87	1,128	1.9%
2012-2013	0	131	0	165	0	48	0	1,179	0	126	1,649	2.8%
2013-2014	0	188	0	296	0	90	1	2,739	0	116	3,430	5.8%
2014-2015	1	340	3	365	1	157	2	2,842	0	135	3,846	6.5%
2015-2016	1	388	7	644	2	125	4	2,842	0	117	4,130	7.0%
2016-2017	10	588	6	589	5	172	2	2,849	0	132	4,353	7.3%
2017-2018	57	636	10	576	10	167	4	2,622	1	139	4,222	7.1%
2018-2019	78	632	27	602	6	121	5	2,600	1	160	4,232	7.1%
2019-2020	155	629	30	586	14	142	3	2,380	1	140	4,080	6.9%
2020-2021	144	556	30	473	12	123	4	1,986	0	112	3,440	5.8%
2021-2022	163	603	36	509	21	134	3	1,996	2	128	3,595	6.1%
2022-2023	194	538	35	533	15	105	4	1,459	2	55	2,940	5.0%
2023-2024	178	504	30	398	14	90	6	1,299	1	65	2,585	4.4%
2024-2025	220	425	37	367	15	73	2	1,050	4	71	2,264	3.8%
2025-2026	189	375	28	336	12	44	5	896	1	47	1,933	3.3%
2026-2027	197	356	14	248	3	37	2	707	1	30	1,595	2.7%
2027-2028	169	346	28	279	10	48	5	641	2	35	1,563	2.6%
2028-2029	175	271	16	208	12	24	5	491	0	20	1,222	2.1%
2029-2030	150	243	16	151	4	12	2	391	0	18	987	1.7%
2030-2031	160	182	24	133	9	16	1	274	1	10	810	1.4%
2031-2032	187	154	15	107	9	6	2	210	2	11	703	1.2%
2032-2033	135	106	8	72	4	10	4	170	1	12	522	0.9%
2033-2034	112	76	12	58	3	8	1	113	0	9	392	0.7%
2034-2035	48	23	2	22	2	1	0	47	0	3	148	0.2%
Total	2,723	8,675	414	8,185	183	1,879	67	35,209	20	2,021	59,376	
Percent of Total	4.6%	14.6%	0.7%	13.8%	0.3%	3.2%	0.1%	59.3%	0.0%	3.4%		

<sup>\*</sup> Table only includes contracts with at least one semester of tuition remaining.

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Virginia529 prePAID

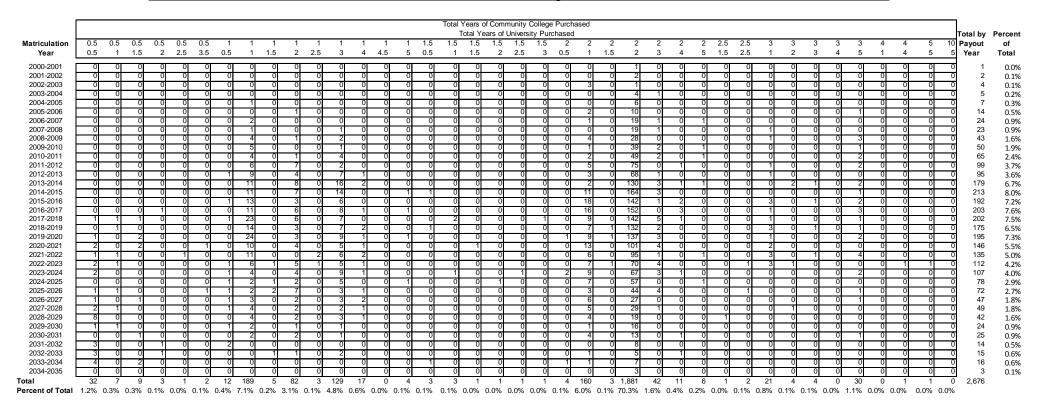
<u>Contract Data as of June 30, 2016 – Contracts Purchasing Tier II Units Only - Number of Contracts\*</u>

ĺ					Total Y	ears of 0	Commur	nity Colle	ge Purc	hased						
		Total Years of University Purchased											Total by	Percent		
Matriculation	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	8	10	Payout	of
Year	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Year	Total
2000-2001	0	1	0	4	0	0	0	0	0	0	0	0	0	0	5	0.2%
2001-2002	0	0	0	15	0	0	0	0	0	0	0	0	0	0	15	0.5%
2002-2003	0	2	0	8	0	0	0	0	0	0	0	0	0	0	10	0.3%
2003-2004	0	1	0	5	0	1	0	0	0	0	0	0	0	0	7	0.2%
2004-2005	0	2	0	15	0	2	0	0	0	0	0	0	0	0	19	0.6%
2005-2006	0	2	0	27	0	1	0	0	0	0	0	0	0	0	30	1.0%
2006-2007	0	1	0	22	0	2	0	0	0	0	0	0	0	0	25	0.8%
2007-2008	0	3	0	37	0	5	0	0	0	0	0	0	0	0	45	1.5%
2008-2009	0	3	0	29	0	2	0	0	0	0	0	0	0	0	34	1.1%
2009-2010	0	2	0	41	0	5	0	0	0	0	0	0	0	0	48	1.6%
2010-2011	0	13	0	53	0	3	0	0	0	0	0	0	0	0	69	2.3%
2011-2012	0	8	0	64	0	10	0	0	0	0	0	0	0	0	82	2.7%
2012-2013	1	19	0	70	0	14	0	0	0	0	0	0	0	0	104	3.5%
2013-2014	0	18	0	74	0	10	0	0	0	0	0	0	0	0	102	3.4%
2014-2015	0	33	0	110	0	24	0	0	0	0	0	0	0	0	167	5.6%
2015-2016	0	29	0	147	0	14	0	0	0	0	0	0	0	0	190	6.3%
2016-2017	2	47	0	136	0	14	0	2	0	0	0	0	0	0	201	6.7%
2017-2018	2	42	0	119	0	15	0	1	0	0	0	0	0	1	180	6.0%
2018-2019	9	35	1	104	1	16	0	1	0	1	0	0	0	1	169	5.6%
2019-2020	14	45	0	99	0	18	0	3	0	0	1	0	0	2	182	6.1%
2020-2021	10	44	1	98	2	10	0	0	0	0	0	0	0	0	165	5.5%
2021-2022	8	44	3	96	1	10	0	0	0	0	0	0	0	0	162	5.4%
2022-2023	11	39	0	88	1	3	0	1	0	0	0	0	0	0	143	4.8%
2023-2024	11	43	1	75	2	7	0	2	0	0	0	0	0	1	142	4.7%
2024-2025	10	40	0	51	1	5	0	2	0	0	0	0	0	0	109	3.6%
2025-2026	10	31	1	43	0	2	0	2	0	1	0	0	0	2	92	3.1%
2026-2027	8	12	0	41	0	9	0	2	1	0	0	1	0	0	74	2.5%
2027-2028	11	19	0	38	0	5	0	0	0	3	0	0	0	1	77	2.6%
2028-2029	11	22	1	40	1	2	0	1	0	0	0	0	0	0	78	2.6%
2029-2030	11	12	0	44	0	3	1	2	1	0	0	0	0	0	74	2.5%
2030-2031	20	12	0	23	1	1	1	3	0	0	0	0	0	1	62	2.1%
2031-2032	20	7	2	16	0	2	0	0	0	0	0	0	0	0	47	1.6%
2032-2033	12	11	0	14	0	2	0	0	0	2	0	0	0	0	41	1.4%
2033-2034	11	6	1	9	0	1	0	3	0	0	0	0	0	0	31	1.0%
2034-2035	5	4	0	4	0	0	0	0	0	0	0	0	0	0	13	0.4%
Total	197	652	11	1,859	10	218	2	25	2	7	1	1	0	9	2,994	
Percent of Total	6.6%	21.8%	0.4%	62.1%	0.3%	7.3%	0.1%	0.8%	0.1%	0.2%	0.0%	0.0%	0.0%	0.3%	, .	

 $<sup>\ ^{*}</sup>$  Table only includes contracts with at least one semester of tuition remaining.

Appendix B (Page 2 of 4)

# Virginia529 prePAID <u>Contract Data as of June 30, 2016 – Contracts Purchasing Tier I and Tier II Units - Number of Contracts\*</u>



<sup>\*</sup> Table only includes contracts with at least one semester of tuition remaining.

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# Participant Data as of June 30, 2016 - Remaining Years of Tuition

Expected Payout <u>Year</u>	University <u>Years</u>	Community College <u>Years</u>
2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 2021-2022 2022-2023 2023-2024 2024-2025 2025-2026 2026-2027 2027-2028 2028-2029 2029-2030 2030-2031 2031-2032 2032-2033 2033-2034 2034-2035 2035-2036 2036-2037 2037-2038 2038-2039 2039-2040 2040-2041	20,460 17,311 16,153 15,373 13,152 12,530 11,371 9,816 8,539 7,157 6,002 5,099 4,267 3,486 2,828 2,239 1,741 1,324 936 594 338 162 62 25 6	1,241 997 809 784 667 643 583 498 432 368 310 270 240 207 178 140 113 90 64 40 26 13 5
Total	160,971	8,721

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# **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 6.25%, which is the assumption set by the Board.

	<u>Inflation</u>	Reason -able <u>Rate</u>	Global <u>Equity</u>	Non- Core Fixed Income	Core Fixed Income	Alternative Investments	University <u>Tuition</u>	CC <u>Tuition</u>
Expected Arithmetic Mean Annual Return	2.50%	3.25%	9.00%	5.80%	3.40%	8.50%	6.57%	6.62%
Standard Deviation	2.00%	2.00%	17.45%	10.35%	5.40%	14.80%	4.40%	6.75%
Correlation: Inflation Reasonable Rate Global Equity Non-Core Fixed Income Core Fixed Income Alternative Investments University Tuition CC Tuition	1.00	0.61 1.00	0.26 0.23 1.00	0.10 0.20 0.59 1.00	0.20 0.50 0.13 0.60 1.00	0.27 0.04 0.58 0.36 -0.21 1.00	0.19 0.01 0.10 0.35 0.28 -0.15	-0.02 -0.22 -0.08 -0.01 0.23 -0.28 0.60 1.00

Based on the economic assumptions above, the expected long-term annualized compound rate of return on investments is 6.25%. The expected annualized compound rate of tuition growth is 5.0% over the next two years and then 6.5% thereafter for both university and community college tuition. The Reasonable Rate for 2016-2017 was fixed at 0.16% for all simulations. Then the expected mean of the Reasonable Rate grades up to 1.25% for 2017-2018, 2.25% for 2018-2019, and 3.25% 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 50% higher than weighted average tuition. 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.

Appendix C (Page 1 of 3)

# 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:

	Numb	per of Ser	nesters o	f Tuition	Purchase	d	
Years since Matriculation							
<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 = \$57.25 Annual Distribution Cost per Contract in Payment Status = \$25.35

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%.

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# Summary of Actuarial Assumptions (continued)

# 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 2016 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.

Appendix C (Page 3 of 3)

# Derivation of Enrollment-Weighted Average Tuition and Mandatory Fees at Four Year Universities Based on Projected Enrollment for 2016-2017

	Tuition and Fees	Fall On Campus In-State Undergraduate FTE for	Percent
School	<u>2016-2017</u>	<u>2016-2017</u>	<u>Distribution</u>
Christopher Newport	\$13,054	4,569	3.44%
George Mason	11,300	19,156	14.40%
James Madison	10,390	14,220	10.69%
Longwood	12,240	4,262	3.20%
Mary Washington	11,630	3,733	2.81%
Norfolk State	8,738	3,794	2.85%
Old Dominion	10,046	16,002	12.03%
Radford	10,081	7,936	5.97%
University of Virginia 2016 Students University of Virginia 2015 Students University of Virginia Returning Students	15,722 14,722 13,722	2,688 2,688 5,375	2.02% 2.02% 4.04%
UVA - Wise	9,539	1,233	0.93%
Virginia Commonwealth Post-2012 Enrollment	13,130	20,591	15.48%
Virginia Military Institute	17,491	1,023	0.77%
Virginia Tech	12,852	18,311	13.77%
Virginia State	8,472	3,134	2.36%
William & Mary - 2016 Students William & Mary - 2015 Students William & Mary - 2014 Students William & Mary - 2013 Students	21,234 19,538 17,988 15,988	1,069 1,069 1,069 <u>1,069</u>	0.80% 0.80% 0.80% <u>0.80%</u>
Weighted Average Tuition and Fees*	\$11,961	132,990	100.00%

<sup>\*</sup>Assumes that 2013, 2014, 2015, and 2016 students are each 25% of total FTE for William & Mary. Assumes that 2015 and 2016 students are each 25% of total FTE for UVA.

Appendix D (Page 1 of 3)

# Derivation of Enrollment-Weighted Average Tuition and Mandatory Fees at Community Colleges

School	Tuition and Fees 2016-2017	Annualized In-State FTE Academic Year 2015-2016	Percent Distribution
Blue Ridge	\$5,474	2,558	2.39%
Central Virginia	4,904	2,502	2.34%
Dabney S. Lancaster	4,776	699	0.65%
Danville	4,760	2,173	2.03%
Eastern Shore	4,840	396	0.37%
Germanna	4,992	4,228	3.95%
J Sargeant Reynolds	5,083	6,560	6.13%
John Tyler	4,771	5,439	5.09%
Lord Fairfax	4,803	3,818	3.57%
Mountain Empire	4,776	1,773	1.66%
New River	4,762	2,643	2.47%
Northern Virginia	5,672	30,684	28.69%
Patrick Henry	4,771	1,730	1.62%
Paul D Camp	4,749	811	0.76%
Piedmont Virginia	4,861	2,855	2.67%
Rappahannock	4,893	1,890	1.77%
Richard Bland	5,712	1,212	1.13%
Southside Virginia	4,760	2,768	2.59%
Southwest Virginia	4,760	1,801	1.68%
Thomas Nelson	4,846	5,890	5.51%
Tidewater	5,651	16,852	15.76%
Virginia Highlands	4,776	1,493	1.40%
Virginia Western	5,432	4,404	4.12%
Wytheville	4,792	<u>1,760</u>	1.65%
Weighted Average Tuition and Fees	\$5,263	106,939	100.00%

Appendix D (Page 2 of 3)

# <u>History of Enrollment-Weighted Average Tuition and Mandatory Fees</u> <u>at Four Year Universities and Community Colleges in Virginia</u>

			Community	
	University		College	
Academic	Tuition	. %	Tuition	. %
<u>Year</u>	and Fees	<u>Increase</u>	and Fees	<u>Increase</u>
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%

<sup>\*</sup> 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:	4.7%	4.7%
Over last 10 years:	6.2%	8.8%
Over last 15 years	7.9%	10.6%
Over last 20 years:	5.6%	6.7%
Over last 25 years:	5.7%	6.7%

Appendix D (Page 3 of 3)

# <u>Cash Flow Projection</u> (amounts in millions)

Fiscal <u>Year</u>	Beginning <u>Balance</u>	Installment Payments*	Tuition <u>Benefits</u>	<u>Expenses</u>	Investment Income	Ending <u>Balance</u>
2017	\$2,426.6	\$46.8	\$250.5	\$4.2	\$133.8	\$2,352.5
2018	2,352.5	39.2	223.6	4.0	130.4	2,294.5
2019	2,294.5	33.1	219.6	3.7	127.1	2,231.4
2020	2,231.4	27.5	223.6	3.5	123.0	2,154.8
2021	2,154.8	22.9	205.2	2.9	119.0	2,088.6
2022	2,088.6	18.5	209.4	2.7	114.9	2,009.9
2023	2,009.9	15.2	203.9	2.4	110.3	1,929.1
2024	1,929.1	12.2	189.0	2.1	106.1	1,856.3
2025	1,856.3	9.6	176.5	1.8	102.3	1,789.9
2026	1,789.9	7.4	158.9	1.6	99.1	1,735.9
2027	1,735.9	5.6	142.6	1.3	96.6	1,694.2
2028	1,694.2	4.1	129.6	1.1	94.7	1,662.3
2029	1,662.3	2.9	116.0	0.9	93.3	1,641.6
2030	1,641.6	2.0	101.2	8.0	92.7	1,634.3
2031	1,634.3	1.4	87.6	0.6	92.9	1,640.4
2032	1,640.4	0.8	73.8	0.5	94.0	1,660.9
2033	1,660.9	0.4	61.1	0.4	95.7	1,695.5
2034	1,695.5	0.1	49.4	0.3	98.3	1,744.2
2035	1,744.2	0.0	37.0	0.2	101.6	1,808.6
2036	1,808.6	0.0	25.0	0.1	106.0	1,889.5
2037	1,889.5	0.0	15.1	0.1	111.2	1,985.5
2038	1,985.5	0.0	7.7	0.0	117.2	2,095.0
2039	2,095.0	0.0	3.2	0.0	123.9	2,215.7
2040	2,215.7	0.0	1.3	0.0	131.1	2,345.5
2041	2,345.5	0.0	0.3	0.0	138.8	2,484.0

<sup>\*</sup> Future installment payments for contracts as of June 30, 2016.

# Appendix E

# prePAID Tuition Benefits

For beneficiaries attending a Virginia public college, university, or community college, prePAID 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. The prePAID payments to in-state public schools will not exceed the actual cost of the in-state undergraduate tuition and mandatory fees. 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 a Virginia independent (private) college or university, prePAID 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 prePAID. 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, prePAID 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 inVEST account. The student or his or her family is responsible for any additional expenses not covered by prePAID. 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.

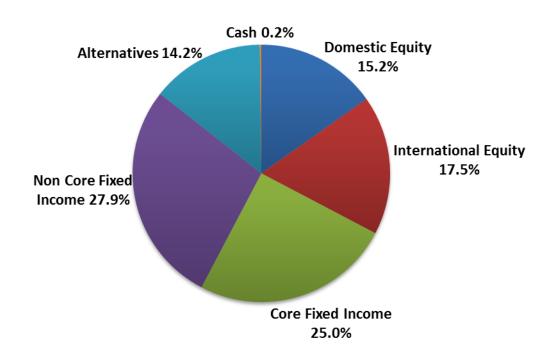
The reasonable rate of return tracks the quarterly performance of the Institutional Money Funds Index as reported in the Money Fund Monitor by iMoneyNet.

## Appendix F

# Attachment C Asset Allocation and Performance Virginia529 prePAID Program June 30, 2016

# **Total Plan** prePAID Allocation

# prePAID Composite Allocation as of June 30, 2016



<sup>\*</sup>May not add to 100% due to rounding

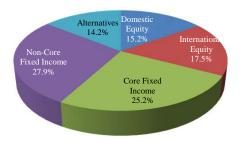


# **Target Allocation**

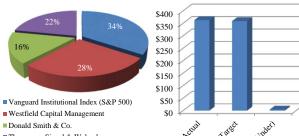


Asset Class	Over/(Under) Target				
Asset Class	Dollars	% of Total Fund			
Domestic Equity	4,271,674	0.2%			
International Equity	771,817	0.0%			
Core Fixed Income	4,720,857	0.2%			
Non-Core Fixed Income	8,693,958	0.4%			
Alternatives	(18,458,306)	-0.8%			

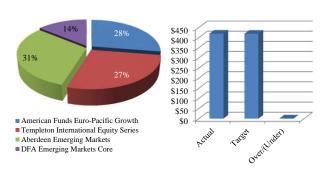
## Actual



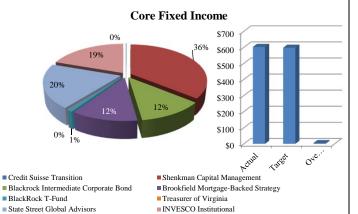




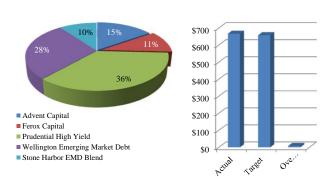
#### **International Equity**



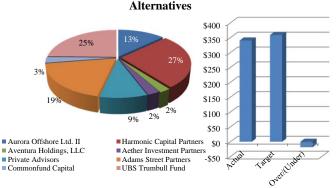
# ■ Thompson, Siegel & Walmsley



# **Non-Core Fixed Income**







	Current	Current	Target			Endin	g June 30, 2016			Return Incep	
Name	Market Value	Allocation		3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Return	Since
Total Fund Total Fund less Private Equity prePAID Total Fund Index	\$2,392,517,518 \$2,278,230,883	100.0% 95.2%	100.0%	1.7% 1.6% 2.4%	3.7% 3.7% 4.5%	0.1% -0.2% 2.5%	<b>4.2% 4.1%</b> 5.8%	4.4% 4.3% 5.7%	<b>4.8%</b> <b>4.8%</b> 5.0%	6.1% 6.1% 5.5%	Oct-97 Oct-97
prePAID Total Equity  Total Equity Index	\$782,697,058	32.7%	32.5%	<b>1.6%</b> 1.2%	<b>2.4%</b> 1.6%	<b>-6.1%</b> -3.2%	<b>4.5%</b> 6.6%	<b>4.8%</b> 6.0%	<b>4.6%</b> <b>4.4%</b>	<b>6.3%</b> 4.9%	Oct-97 Oct-97
PrePAID Total Domestic Equity  Domestic Equity Policy Index	\$363,188,705	15.2%	15.0%	<b>2.7%</b> 2.6%	<b>2.5%</b> 3.6%	<b>-3.3%</b> 2.1%	<b>8.4%</b> 11.1%	<b>9.2%</b> 11.6%	<b>6.9%</b> 7.3%	<b>7.4%</b> 6.4%	Oct-97
Vanguard Institutional Index S&P 500 Index (Total Return)	\$124,775,762	5.2%	7.5%	2.5% 2.5%	3.8% 3.8%	4.0% 4.0%	11.6% 11.7%	12.1% 12.1%	7.4% 7.4%	3.9% 4.2%	Jan-00 <i>Jan-00</i>
Westfield Capital Management  Russell 2500 Growth	\$100,051,555	4.2%	2.5%	2.3% 2.7%	-4.2% 0.0%	-12.8% -7.7%	6.4% 9.1%	7.2% 9.3%	9.0% <b>8.0%</b>	10.3% 9.4%	Oct-03 Oct-03
Thompson, Siegel and Walmsley  TSW Custom Benchmark <sup>1</sup>	\$79,467,843	3.3%	2.5%	3.6% 4.4%	7.4% 7.8%	1.7% <i>0.2%</i>	11.4% 8.1%	12.1% 9.6%	6.8% 6.0%	10.7% 8.9%	Oct-03 Oct-03
Donald Smith and Company Russell 2000 Value	\$58,893,545	2.5%	2.5%	2.9% 4.3%	6.0% 6.1%	-5.5% -2.6%	2.6% 6.4%	3.9% 8.1%	6.1% 5.2%	10.7% 8.2%	Oct-03 Oct-03
prePAID Total International Equity International Equity BM****	\$419,508,353	17.5%	17.5%	<b>0.5%</b> -0.3%	<b>2.4%</b> 0.5%	<b>-8.5%</b> -10.4%	<b>0.8%</b> 1.0%	<b>0.7%</b> -0.2%	<b>3.2%</b> 2.1%	<b>5.5%</b> 4.2%	Oct-97 Oct-97
Capital Research American Funds  MSCI EAFE (Gross)	\$115,494,345	4.8%	5.0%	-0.3% -1.2%	-2.6% -4.0%	-9.6% -9.7%	3.8% 2.5%	2.5% 2.1%	3.9% 2.1%	7.1% 5.8%	Nov-01 Nov-01
Franklin Templeton  MSCI EAFE (Gross)	\$114,084,202	4.8%	5.0%	-3.5% -1.2%	-6.5% -4.0%	-13.9% -9.7%	0.0% 2.5%	0.2% 2.1%	2.3% 2.1%	4.9% 3.9%	Aug-97 <i>Aug-97</i>
Aberdeen Asset Management  MSCI EM (Emerging Markets)	\$131,259,704	5.5%	7.5%	4.3% 0.8%	13.0% 6.6%	-3.7% -11.7%	-1.1% <i>-1.</i> 2%	-0.5% -3.4%	3.9%	4.6% 1.4%	Nov-09 Nov-09
DFA Emerging Markets Core  MSCI EM (Emerging Markets)	\$58,670,101	2.5%	7.5%	2.2% 0.8%	9.6% 6.6%	 -11.7%	-1.2%	 -3.4%	 3.9%	9.6% 6.6%	Jan-16 <i>Jan-16</i>

\*Total Fund Index: 32.50% MSCI ACWI Index, 3.90% NCREIF ODCE Index, 4.80% Russell 3000 + 3%, 1.95% Citigroup 3-Month T-Bill + 3.5%, 4.35% Citigroup 3-Month T-Bill + 4%, 9.90% Barclays US Corporate High Yield Index, 7.70% BofA ML US Convertibles Index, 9.90% JPMorgan EMBI, 15.00% Barcl Aggregate Index, 5.00% Barclays US TIPS Index, 5.00% Citigroup US T-Bill + 1%

<sup>\*\*</sup>Total Equity Index: 100.0% MSCI ACWI Index

<sup>\*\*\*</sup>Domestic Equity Policy Index: 100% Russell 3000 Index;

<sup>\*\*\*\*</sup>International Equity Policy Index: 57% MSCI EAFE and 43% MSCI EM

<sup>&</sup>lt;sup>1</sup>TSW Custom Benchmark: Russell 2000 Value Index through February 28, 2011; Russell 2500 Value Index thereafter Returns calculated by BNY Mellon Asset Servicing.

				Ending June 30, 2016					Return Since Inception		
Name	Current Market Value	Current Allocation	Target Allocation	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Return	Since
prePAID Alternatives Alternatives BM	\$340,796,940	14.2%	15.0%	<b>-0.8%</b> 2.0%	1.6% 4.1%	<b>3.6%</b> 7.0%	<b>5.1%</b> 7.5%	<b>4.6%</b> 7.1%	<b>2.3%</b> 3.4%	<b>4.4%</b> 5.5%	<b>May-05</b> <i>May-05</i>
Harmonic Capital Partners <sup>1</sup>	\$90,658,667	3.8%		-8.4%	-0.5%	0.3%	0.1%			3.7%	Jan-12
T-Bills + 4%				1.0%	2.1%	4.1%	4.1%			3.9%	Jan-12
Aventura	\$7,872,093	0.3%		4.0%	5.4%	8.4%	10.0%	9.2%		4.1%	Apr-08
NCREIF Property Index <sup>2</sup>				2.2%	5.2%	11.8%	11.9%	11.9%	7.6%	5.8%	Apr-08
Aurora Offshore	\$44,036,976	1.8%		0.8%	-3.3%	-6.5%	1.6%	1.7%		2.2%	Mar-10
T-BILLS + 3.5%				0.9%	1.8%	3.6%	3.6%	3.6%	-	3.5%	Mar-10
Private Advisors <sup>3</sup>	\$31,377,958	1.3%		3.4%	3.4%	13.3%	10.0%	4.0%		1.8%	Oct-10
Russell 3000 + 3%				3.2%	4.9%	5.1%	14.1%	14.6%	-	16.4%	Oct-10
Adams Street Partners <sup>3</sup>	\$64,611,140	2.7%		2.9%	2.9%	7.1%	7.2%	1.0%		2.0%	Jan-11
Russell 3000 + 3%				3.2%	4.9%	5.1%	14.1%	14.6%		14.7%	Jan-11
Aether <sup>3</sup>	\$8,668,239	0.4%		8.8%	8.8%	10.4%				0.4%	Dec-13
Russell 3000 + 3%				3.2%	4.9%	5.1%	14.1%	14.6%		10.4%	Dec-13
Commonfund <sup>3</sup>	\$9,629,298	0.4%		-1.3%	-1.3%	-7.5%	-7.0%			-13.4%	Nov-12
Russell 3000 + 3%				3.2%	4.9%	5.1%	14.1%	14.6%		16.6%	Nov-12
UBS Trumbull	\$83,942,569	3.5%		1.8%	4.6%	10.8%	10.7%	10.2%		9.9%	Jan-11
NCREIF NFI ODCE⁴				2.2%	5.6%	13.7%	13.6%	13.3%		12.8%	Jan-11
prePAID Non Core Fixed Income	\$666,708,515	27.9%	27.5%	3.2%	6.3%	3.9%	4.6%	5.0%	5.0%	5.4%	May-05
Non Core Fixed BM				4.5%	7.9%	4.4%	5.7%	6.3%	5.6%	6.3%	May-05
Prudential High Yield	\$239,433,007	10.0%	10.0%	3.8%	7.2%	3.4%	4.6%	5.6%		7.2%	Nov-09
Barclays Capital High Yield				5.5%	9.1%	1.6%	4.2%	5.8%	7.6%	8.0%	Nov-09
Barclays US High Yield Ba/B 1% Issuer Cap				4.2%	7.7%	1.9%	4.5%	5.9%	7.2%	7.7%	Nov-09
Advent Capital Management	\$101,756,123	4.3%	7.5%	-0.5%	-2.3%	-2.7%				2.9%	Sep-13
BofA Merrill Lynch Global 300 Convertible Index				2.2%	2.5%	0.6%	6.1%	4.9%	5.7%	5.6%	Sep-13
Barclays Global Defensive Convertible Index IG				-0.3%	1.6%	0.5%	1.7%	1.5%		1.1%	Sep-13
Ferox Capital	\$70.141.757	2.9%	7.5%	-0.1%	-1.6%	-3.3%				2.7%	Aug-13
BofA Merrill Lynch Global 300 Convertible Index				2.2%	2.5%	0.6%	6.1%	4.9%	5.7%	5.1%	Aug-13
Barclays Global Defensive Convertible Index IG				-0.3%	1.6%	0.5%	1.7%	1.5%		1.1%	Aug-13
Wellington Management	\$187,878,941	7.9%		5.7%	11.4%	11.2%	6.8%	6.5%		7.6%	Dec-09
JPMorgan EMBI Index	Ψ101,010,041	7.570		5.4%	10.9%	10.3%	6.4%	6.2%	7.9%	7.4%	Dec-09
Stone Harbor	\$67,498,686	2.8%		4.3%	13.4%	4.7%	-0.3%	0.2%		0.9%	Apr-11
Stone Harbor Custom Benchmark <sup>5</sup>	ψ01,430,000	2.070		3.9%	12.2%	6.0%	1.8%	2.1%		2.8%	Apr-11
											-
prePAID Core Fixed Income	\$602,315,006	25.2%	25.0%	1.5%	3.5%	1.9%	2.3%	2.5%	4.0%	5.1%	Oct-97
Core Fixed Income Benchmark				1.7%	4.5%	4.7%	3.2%	3.0%	4.6%	5.1%	Oct-97
Barclays Aggregate				2.2%	5.3%	6.0%	4.1%	3.8%	5.1%	5.4%	Oct-97
Blackrock Intermediate Corporate	\$71,594,491	3.0%	5.0%	2.1%	4.9%	5.0%				3.5%	Jun-15
Barclays Int Credit				2.1%	4.9%	5.0%	3.9%	4.0%	5.4%	3.7%	Jun-15
Brookfield MBS	\$70,534,750	2.9%	5.0%	1.4%	3.7%	4.4%				4.5%	Nov-13
Barclays US MBS				1.1%	3.1%	4.3%	3.8%	3.0%	5.0%	3.7%	Nov-13
Barclays US Commercial Mortgage-Backed Securit	ties			2.2%	5.9%	6.1%	4.1%	4.5%	5.9%	4.8%	Nov-13
SSgA TIPS	\$119,809,099	5.0%	5.0%	1.7%	6.2%	4.3%	2.1%	2.5%		3.3%	Dec-10
Barclays Capital US TIPS	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2.2.0		1.7%	6.2%	4.4%	2.3%	2.6%	4.8%	3.1%	Dec-10
Shenkman Capital Management	\$215,620,067	9.0%	5.0%	2.1%	3.4%	-1.2%				1.7%	Sep-13
Credit Suisse Leveraged Loans	Ţ I , OZ 0, 0 0 1	0.0,0	2.270	2.9%	4.2%	0.9%	3.0%	4.0%	4.2%	2.8%	Sep-13
INVESCO Institutional	\$118,226,161	4.9%	5.0%	0.5%	1.0%	2.1%	2.0%	2.3%	3.2%	4.1%	Jan-00
Stable Value Custom BM	ψσ, <u>L</u> Lσ,101		0.070	0.3%	0.6%	1.1%	1.1%	1.1%	1.9%	3.1%	Jan-00
BlackRock	\$5,782,165	0.2%	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%		0.1%	Apr-10
Citigroup 3-Month T-Bill	ψο, το Σ, το σ	J.2 /0	0.070	0.1%	0.1%	0.1%	0.1%	0.1%	1.0%	0.1%	Apr-10
This is the second Nobel Concern to the second of the seco				0,0	0	0,0	0,0	0,0	,	0	

<sup>\*</sup>Alternatives BM: 26.0% NCREIF ODCE Index, 32.0% Russell 3000 + 3%, 13.0% Citigroup 3-Month T-Bill + 3.5%, 29.0% Citigroup 3-Month T-Bill + 4%

<sup>\*\*</sup>Non Core Fixed BM: 36% Barclays US Corporate High Yield Index, 28% BofA ML Global 300 Convertibles Index, 36% JPMorgan EMBI 1 month lag

<sup>\*\*\*</sup>Core Fixed Income Benchmark: 60% Barclays US Aggregate, 20% Barclays Capital US TIPS Index, 20% Citigroup US T-Bill + 1%

<sup>&</sup>lt;sup>1</sup>Harmonic Captial Partners reported one month in arrears

<sup>&</sup>lt;sup>2</sup>NCREIF Property Index reported one quarter in arrears

<sup>&</sup>lt;sup>3</sup>Please see page after gross of fee performance summary for the IRR calculation of Private Advisors, Adams Street Partners, Aethor and Commonfund. The market value shown here reflects the valuations of the funds at the end of the prior quarter

<sup>&</sup>lt;sup>4</sup>UBS Trumbull Property Fund and NCREIF NFI ODCE Index reported one quarter in arrears

<sup>&</sup>lt;sup>5</sup>Stone Harbor Custom Benchmark is comprised of 50% JPMorgan EMBI Global Diversified Index/50% JPMorgan GBI-EM Global Diversified

Returns calculated by BNY Mellon Asset Servicing.

							Er	iding Jui	ne 30, 20	016					n Since ption
Name	Current Market Value	Current Allocation	Target Allocation	3 Мо	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank	Return	Since
Total Fund Total Fund less Private Equity prePAID Total Fund Index	\$2,392,517,518 \$2,278,230,883	100.0% 95.2%	100.0%	1.7% 1.7% 2.4%	53  	0.3% 0.0% 2.5%	45  	<b>4.5% 4.3%</b> 5.8%	96  	4.6% 4.5% 5.7%	96  	5.0% 5.0% 5.0%	78  	6.3% 6.3% 5.5%	Oct-97 Oct-97
prePAID Total Equity  Total Equity Index	\$782,697,058	32.7%	32.5%	<b>1.6%</b> 1.2%		<b>-5.9%</b> -3.2%		<b>4.7%</b> 6.6%		<b>5.1%</b> 6.0%		<b>5.0%</b> 4.4%		<b>6.6%</b> 4.9%	Oct-97
prePAID Total Domestic Equity  Domestic Equity Policy Index	\$363,188,705	15.2%	15.0%	<b>2.9%</b> 2.6%		<b>-2.8%</b> 2.1%		<b>9.0%</b> 11.1%		<b>9.7%</b> 11.6%		<b>7.4%</b> 7.3%		<b>7.8%</b> 6.4%	Oct-97 Oct-97
Vanguard Institutional Index  S&P 500 Index (Total Return)  Westfield Capital Management	\$124,775,762 \$100.051.555	5.2%	7.5% 2.5%	2.5% 2.5% 2.5%	31 31 65	4.0% 4.0% -12.1%	20 20 89	11.6% 11.7% 7.2%	25 19 75	12.1% 12.1% 8.0%	22 20 70	7.4% 7.4% 9.8%	25 23 22	3.9% 4.2% 11.2%	Jan-00 Jan-00 Oct-03
Russell 2500 Growth Thompson, Siegel and Walmsley	\$79,467,843	3.3%	2.5%	2.7%	62 27	-7.7% 2.5%	35 12	9.1% 12.3%	39 4	9.3% 12.9%	38 5	8.0% 7.6%	58 49	9.4% 11.6%	Oct-03 Oct-03
TSW Custom Benchmark <sup>1</sup> Donald Smith and Company Russell 2000 Value	\$58,893,545	2.5%	2.5%	4.4% 3.2% 4.3%	21 42 21	0.2% -4.6% -2.6%	22 69 48	8.1% 3.5% 6.4%	57 95 80	9.6% 4.8% 8.1%	62 99 84	6.0% 7.0% 5.2%	85 63 97	8.9% 11.7% 8.2%	Oct-03 Oct-03
prePAID Total International Equity International Equity BM****	\$419,508,353	17.5%	17.5%	<b>0.5%</b> -0.3%		<b>-8.5%</b> -10.4%		0.8% 1.0%		<b>0.7%</b> -0.2%		3.2% 2.1%		5.5% 4.2%	Oct-97
Capital Research American Funds  MSCI EAFE (Gross)	\$115,494,345	4.8%	5.0%	-0.3% -1.2%	33 51	-9.6% -9.7%	54 56	3.8% 2.5%	29 48	2.5% 2.1%	35 43	3.9% 2.1%	20 52	7.1% 5.8%	Nov-01 Nov-01
Franklin Templeton  MSCI EAFE (Gross)	\$114,084,202	4.8%	5.0%	-3.5% -1.2%	89 51	-13.9% -9.7%	89 56	0.0% 2.5%	86 48	0.2% 2.1%	81 43	2.3%	47 52	4.9% 3.9%	Aug-97 Aug-97
Aberdeen Asset Management  MSCI EM (Emerging Markets)	\$131,259,704	5.5%	7.5%	0.8%	14 79	-3.7% -11.7%	10 <i>64</i>	-1.1% -1.2%	40 43	-0.5% -3.4%	14 <i>54</i>	3.9%	34	4.6% 1.4%	Nov-09
DFA Emerging Markets Core  MSCI EM (Emerging Markets)	\$58,670,101	2.5%	7.5%	2.2% 0.7%	46 80	-12.1%	67	-1.6%	54	-3.8%	58	3.5%	42	9.6% 6.6%	Jan-16 Jan-16

\*Total Fund Index: 32.50% MSCI ACWI Index, 3.90% NCREIF ODCE Index, 4.80% Russell 3000 + 3%, 1.95% Citigroup 3-Month T-Bill + 3.5%, 4.35% Citigroup 3-Month T-Bill + 4%, 9.90% Barclays US Corporate High Yield Index, 7.70% BofA ML US Convertibles Index, 9.90% JPMorgan EMBI, 15.00% Barclays US Aggregate Index, 5.00% Barclays US TIPS Index, 5.00% Citigroup US T-Bill + 1%

Returns calculated by BNY Mellon Asset Servicing.

<sup>\*\*</sup>Total Equity Index: 100.0% MSCI ACWI Index

<sup>\*\*\*</sup>Domestic Equity Policy Index: 100% Russell 3000 Index;

<sup>\*\*\*\*</sup>International Equity Policy Index: 57% MSCI EAFE and 43% MSCI EM

<sup>&</sup>lt;sup>1</sup>TSW Custom Benchmark: Russell 2000 Value Index through February 28, 2011; Russell 2500 Value Index thereafter "Rank" equals percentile, see individual manager page for percentile. "1" is the top ranking and "100" is the bottom ranking.

	Current	Current	Target				En	nding Jur	ne 30, 20	016					n Since ption
Name	Market Value	Allocation	Allocation	3 Мо	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank	Return	Since
prePAID Alternatives	\$340,796,940	14.2%	15.0%	-0.8%		3.7%		5.2%		4.7%		2.4%		4.5%	May-05
Alternatives BM				2.0%		7.0%		7.5%		7.1%		3.4%		5.5%	May-05
Harmonic Capital Partners¹	\$90,658,667	3.8%		-8.4%	97	0.5%	51	0.4%	99					4.1%	Jan-12
T-Bills + 4%				1.0%	45	4.1%	30	4.1%	66					3.9%	Jan-12
Aventura	\$7,872,093	0.3%		4.0%		8.4%		10.0%		9.2%				4.1%	Apr-08
NCREIF Property Index <sup>2</sup>				2.2%		11.8%		11.9%		11.9%		7.6%		5.8%	Apr-08
Aurora Offshore	\$44,036,976	1.8%		0.8%	53	-6.5%	66	1.6%	69	1.7%	77			2.2%	Mar-10
T-BILLS + 3.5%				0.9%	46	3.6%	6	3.6%	30	3.6%	37			3.5%	Mar-10
Private Advisors <sup>3</sup>	\$31,377,958	1.3%		3.4%		13.3%		10.0%		4.0%				1.8%	Oct-10
Russell 3000 + 3%				3.2%		5.1%		14.1%		14.6%				16.4%	Oct-10
Adams Street Partners³	\$64,611,140	2.7%		2.9%		7.1%		7.2%		1.0%				2.0%	Jan-11
Russell 3000 + 3% Aether³	\$8,668,239	0.4%		3.2% 8.8%		5.1% 10.4%		14.1%		14.6%				14.7% 0.4%	<i>Jan-11</i> Dec-13
Russell 3000 + 3%	φο,000,239	0.4%		3.2%		5.1%		14.1%		14.6%				10.4%	Dec-13
Commonfund	\$9,629,298	0.4%		-1.3%		-7.5%		-7.0%						-13.7%	Nov-12
Russell 3000 + 3%				3.2%		5.1%		14.1%		14.6%				16.6%	Nov-12
UBS Trumbull	\$83,942,569	3.5%		1.8%	99	10.8%	99	10.7%	99	10.2%	99			9.9%	Jan-11
NCREIF NFI ODCE⁴				2.2%	1	13.7%	1	13.6%	1	13.3%	1			12.8%	Jan-11
prePAID Non Core Fixed Income	\$666,708,515	27.9%	27.5%	3.3%		4.1%		4.9%		5.2%		5.4%		5.8%	May-05
Non Core Fixed BM				4.5%		4.4%		5.7%		6.3%		5.6%		6.3%	May-05
Prudential High Yield	\$239,433,007	10.0%	10.0%	3.8%	69	3.7%	7	5.0%	20	6.0%	42			7.5%	Nov-09
Barclays Capital High Yield				5.5%	16	1.6%	38	4.2%	51	5.8%	52	7.6%	45	8.0%	Nov-09
Barclays US High Yield Ba/B 1% Issuer Cap				4.2%	60	1.9%	34	4.5%	37	5.9%	45	7.2%	63	7.7%	Nov-09
Advent Capital Management	\$101,756,123	4.3%	7.5%	-0.4%	62	-2.1%	11							3.4%	Sep-13
BofA Merrill Lynch Global 300 Convertible Index				2.2%	1	0.6%	1	6.1%	4	4.9%	1	5.7%	15	5.6%	Sep-13
Barclays Global Defensive Convertible Index IG				-0.3%	54	0.5%	1	1.7%	89	1.5%	99			1.1%	Sep-13
Ferox Capital	\$70,141,757	2.9%	7.5%	-0.1%	49	-3.3%	56							2.7%	Aug-13
BofA Merrill Lynch All US Convertibles				2.2%	1	0.6%	1	6.1%	4	4.9%	1	5.7%	15	5.1%	Aug-13
Barclays Global Defensive Convertible Index IG				-0.3%	54	0.5%	1	1.7%	89	1.5%	99			1.1%	Aug-13
Wellington Management	\$187,878,941	7.9%		5.7%	45	11.2%	18	6.8%	33	6.5%	43			7.6%	Dec-09
JPMorgan EMBI Index				5.4%	61	10.3%	29	6.4%	45	6.2%	53	7.9%	77	7.4%	Dec-09
Stone Harbor	\$67,498,686	2.8%		4.3%	93	4.7%	96	-0.3%	99	0.2%	99			0.9%	Apr-11
Stone Harbor Custom Benchmark <sup>5</sup>				3.9%	95	6.0%	95	1.8%	98	2.1%	99			2.8%	Apr-11
prePAID Core Fixed Income	\$602,315,006	25.2%	25.0%	1.6%		2.1%		2.5%		2.6%		4.2%		5.2%	Oct-97
Core Fixed Income Benchmark	Ψ002,010,000	20.270	20.070	1.7%		4.7%		3.2%		3.0%		4.6%		5.1%	Oct-97
Barclays Aggregate				2.2%		6.0%		4.1%		3.8%		5.1%		5.4%	Oct-97
Blackrock Intermediate Corporate	\$71.594.491	3.0%	5.0%	2.2%	11	5.0%	9	4.170		3.0%		J. 176		3.6%	Jun-15
Backlock Intermediate Corporate  Barclays Int Credit	\$71,594,491	3.0%	3.0%	2.1%	11	5.0%	10	3.9%	12	4.0%	10	5.4%	22	3.7%	Jun-15
Brookfield MBS	\$70,534,750	2.9%	5.0%	1.5%	50	4.6%	31	3.9%		4.0%		J.4% 		4.7%	Nov-13
	φ10,334,130	2.576	3.076	1.1%	86	4.3%	50	3.8%	86	3.0%	89	5.0%	73	3.7%	Nov-13
Barclays US MBS															
Barclays US Commercial Mortgage-Backed Securities	<b>A</b> 440 000 000	<b>5</b> 00/	<b>5</b> 00/	2.2%	10	6.2%	1	4.1%	51	4.5%	27	5.9%	31	4.8%	Nov-13
SSgA TIPS	\$119,809,099	5.0%	5.0%	1.7%	38	4.3%	13	2.2%	17	2.6%	14	1.00/		3.4%	Dec-10
Barclays Capital US TIPS Shankman Capital Management	¢245 620 007	0.00/	5.0%	1.7% 2.2%	36 72	4.4% -0.7%	13 98	2.3%	13	2.6%	11	4.8%	12	3.1% 2.0%	Dec-10
Shenkman Capital Management	\$215,620,067	9.0%	5.0%												Sep-13
Credit Suisse Leveraged Loans	\$440,000,404	4.00/	F 00/	2.9%	32	0.9%	85	3.0%	79	4.0%	82	4.2%	88	2.8%	Sep-13
INVESCO Institutional	\$118,226,161	4.9%	5.0%	0.5%	1	2.1%	6	2.1%	6	2.4%	3	3.2%	35	4.2%	Jan-00
Stable Value Custom BM	¢5 700 405	0.20/	0.00/	0.3%	90	1.1%	91	1.1%	91	1.1%	99	1.9%	99	3.1%	Jan-00
BlackRock	\$5,782,165	0.2%	0.0%	0.1%	32 24	0.1% 0.1%	33 22	0.0% 0.1%	32 19	0.0% 0.1%	31 17	1.0%	56	0.1% 0.1%	Apr-10
Citigroup 3-Month T-Bill	12 00/ Citiaroup 2 Month	T Dill . 2 F0/ 20	00/ Citiarous 2 I	U. 1%	40/	0.1%	22	0.1%	19	0.1%	17	1.0%	50	0.1%	Apr-10

<sup>\*</sup>Alternatives BM: 26.0% NCREIF ODCE Index, 32.0% Russell 3000 + 3%, 13.0% Citigroup 3-Month T-Bill + 3.5%, 29.0% Citigroup 3-Month T-Bill + 4% \*\*Non Core Fixed BM: 36% Barclays US Corporate High Yield Index, 28% BofA ML Global 300 Convertibles Index, 36% JPMorgan EMBI 1 month lag

<sup>\*\*\*</sup>Core Fixed Income Benchmark: 60% Barclays US Aggregate, 20% Barclays Capital US TIPS Index, 20% Citigroup US T-Bill + 1%

<sup>&</sup>lt;sup>1</sup>Harmonic Captial Partners reported one month in arrears

<sup>&</sup>lt;sup>2</sup>NCREIF Property Index reported one quarter in arrears

<sup>&</sup>lt;sup>3</sup>Please see page after gross of fee performance summary for the IRR calculation of Private Advisors, Adams Street Partners, Aethor and Commonfund. The market value shown here reflects the valuations of the funds at the end of the prior quarter <sup>4</sup>UBS Trumbull Property Fund and NCREIF NFI ODCE Index reported one quarter in arrears

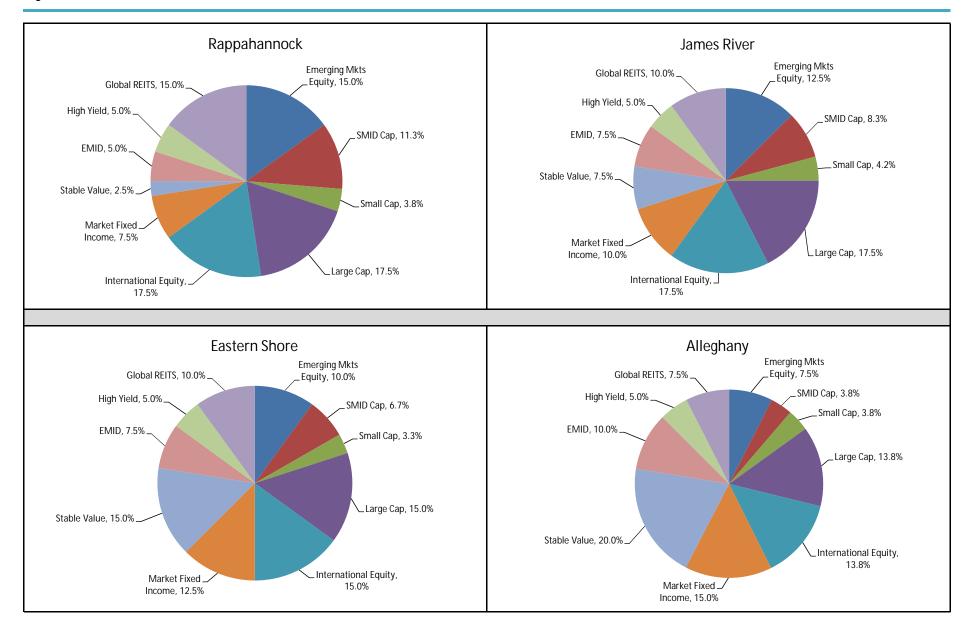
<sup>&</sup>lt;sup>5</sup>Stone Harbor Custom Benchmark is comprised of 50% JPMorgan EMBI Global Diversified Index/50% JPMorgan GBI-EM Global Diversified

# **Attachment D**

# Asset Allocation and Performance Virginia529 inVEST Program June 30, 2016

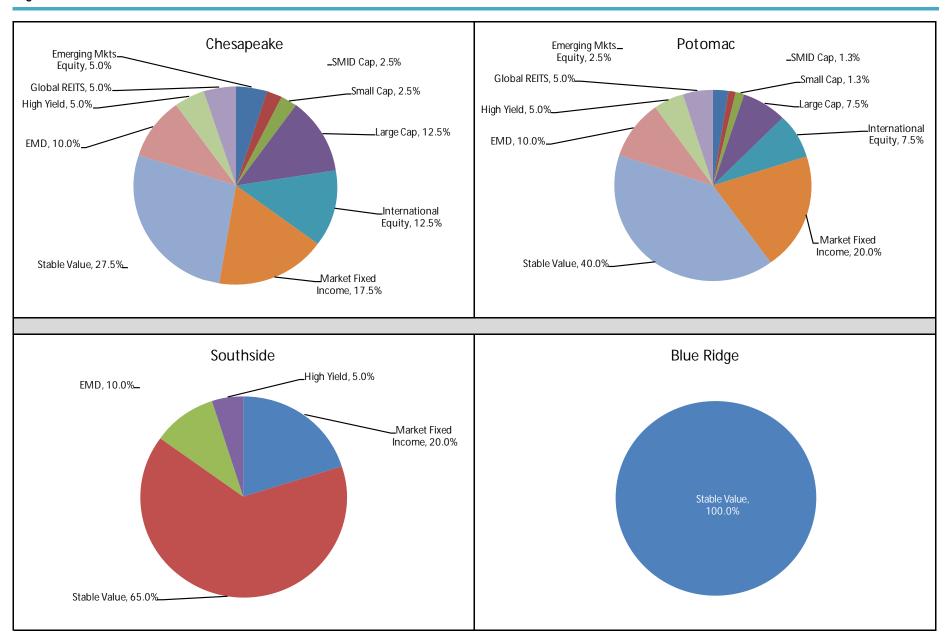
# **Fund Profile**

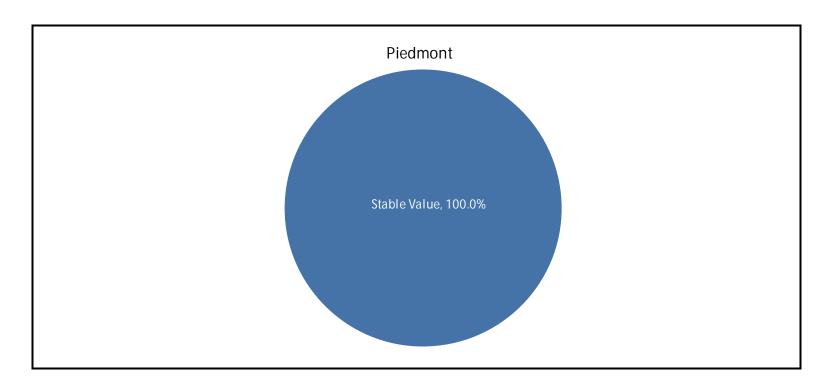
# Age-Based Portfolios



# **Fund Profile**

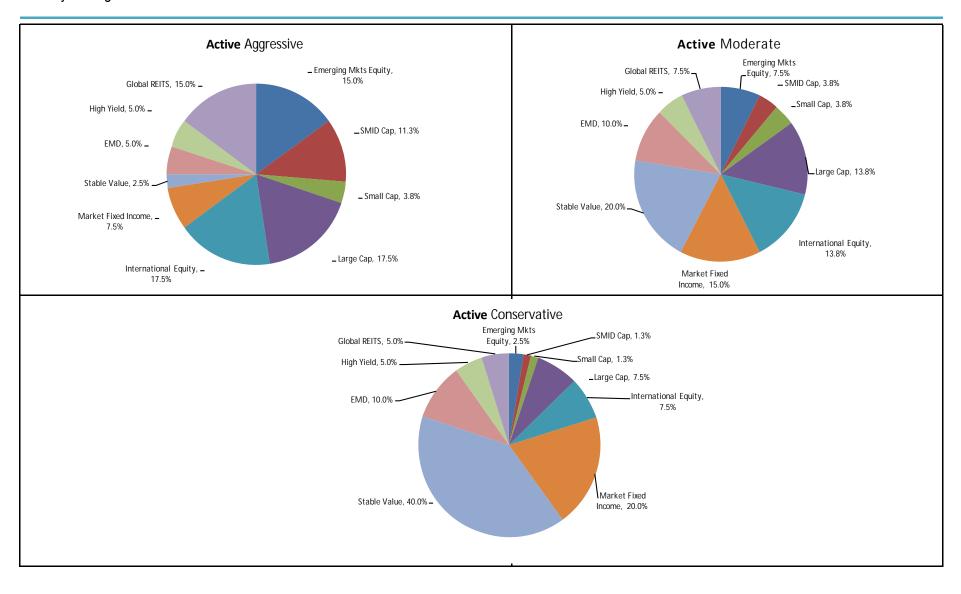
# Age-Based Portfolios



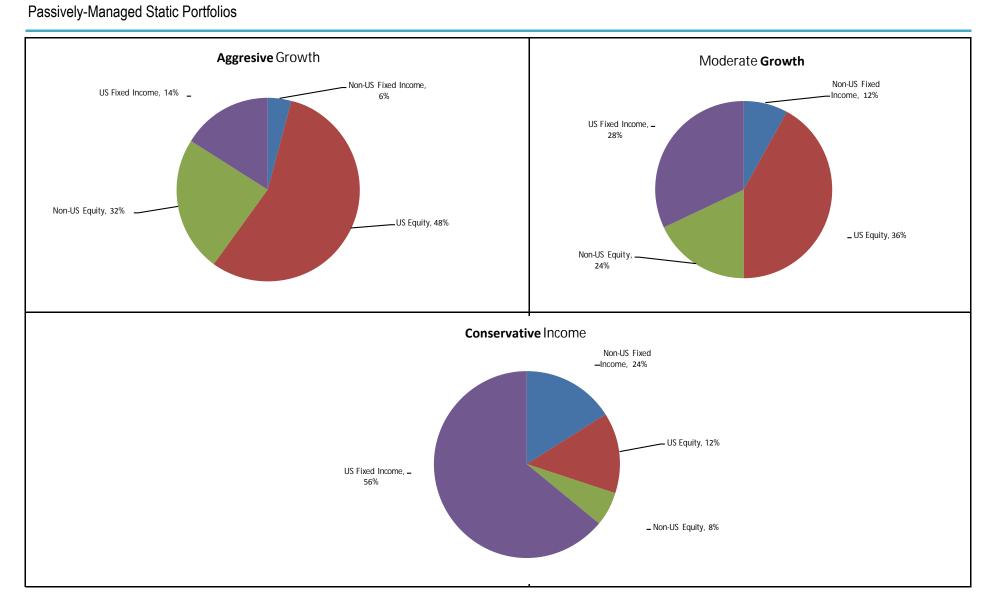


# **Fund Profile**

# Actively-Managed Static Portfolios



Fund Profile





Virginia529 inVEST
Individual Manager Investment Performance
as of June 30, 2016
Net of Fees

	Month Ending	Quarter Ending	Cal Year Ending	1 Year Ending	3 Year Ending	5 Year Ending	10 Year Ending	Inception Ending	Inception Date
AGE-BASED PORTFOLIOS - Underlying Managers									
Large Cap Domestic Equity									
Vanguard Institutional Index	0.09	2.28	3.64	3.80	11.73	12.14	7.47	4.19	Jan-00
S&P 500 Index	0.26	2.46	3.84	3.99	11.66	12.10	7.42	4.17	
Small/Mid Cap Domestic Equity									
Rothschild Asset Management	-0.22	2.11	2.79	-4.52	10.69	10.70	7.42	10.50	Jan-00
Russell 2500	-0.04	3.57	3.98	-3.67	8.61	9.48	7.32	7.85	
Vanguard Small Cap Index	0.14	3.86	4.88	-3.01	9.14	10.03	7.81	7.77	Jan-00
Custom Small Cap Index <sup>1</sup>	0.27	3.97	5.01	-2.91	8.93	9.85	7.67	7.63	
International Equity									
<b>Templeton Inst. Foreign Equity Series</b>	-4.40	-3.46	-6.46	-13.89	0.20	0.30	2.31	3.88	Jan-00
MSCI EAFE	-3.31	-1.19	-4.04	-9.73	2.51	2.14	2.05	2.41	
Am. Funds Euro-Pacific Growth	-2.00	-0.32	-2.64	-9.57	3.90	2.59	3.99	8.55	Jan-03
MSCI EAFE	-3.31	-1.19	-4.04	-9.73	2.51	2.14	2.05	7.31	
<b>Aberdeen Emerging Markets Fund</b>	6.21	4.32	12.98	-3.70	-1.07	-0.35		-0.01	Jan-11
MSCI Emerging Markets Index	4.10	0.80	6.60	-11.71	-1.21	-3.44		-2.95	
<b>DFA Emerging Markets Core Fund</b>	5.54	2.22						2.22	Apr-16
MSCI Emerging Markets Index	4.10	0.80						0.80	•
Global REITs									
Morgan Stanley Global REIT Fund	2.68	1.68	6.59	7.63	7.19	6.93		7.06	Jan-11
FTSE EPRA/NAREIT Developed RE Index	3.75	3.74	9.38	12.57	8.94	8.62		8.97	
Fixed Income									
INVESCO / PRIMCO	0.15	0.45	0.89	1.73	1.59	1.93	3.20	4.07	Jan-00
Stable Value Custom Benchmark	0.10	0.31	0.61	1.14	1.07	1.06	1.94	3.08	
<b>Stone Harbor Emerging Market Debt</b>	3.67	5.96	13.19	9.49	4.85	4.36		4.79	Jan-11
JP Morgan EMBI Global Diversified	3.37	5.02	10.31	9.79	7.20	6.45		6.75	
Prudential High Yield Bond Fund	0.54	4.07	7.05	3.48	4.65	5.52		5.49	Jan-11
Barclay's Corporate High Yield	0.92	5.52	9.06	1.62	4.18	5.84		6.23	



Virginia529 inVEST
Individual Manager Investment Performance
as of June 30, 2016
Net of Fees

Month Quarter Cal Year 1 Year 3 Year 5 Year 10 Year Inception Inception

	Ending	Date							
STATIC PORTFOLIOS - Underlying Funds									
Vanguard LifeStrategy Growth	0.19	1.86	3.01	-0.46	7.29	7.05	5.30	5.76	Jan-02
Aggressive Benchmark	0.18	1.89	3.28	0.41	7.55	7.52	5.82	6.13	
Vanguard LifeStrategy Mod. Growth	0.64	2.01	3.74	1.47	6.66	6.37	5.39	5.64	Jan-02
Moderate Benchmark	0.67	2.01	4.15	2.11	6.63	6.53	5.75	5.91	
Vanguard LifeStrategy Income	1.47	2.22	5.03	4.88	5.15	4.49	4.86	4.70	Jan-02
Conservative Benchmark	1.65	2.22	5.78	5.33	4.66	4.36	4.83	4.70	
<b>Parnassus Core Equity</b>	-0.39	0.76	3.41	4.19	11.55	12.66		12.86	Nov-09
S&P 500 Index	0.26	2.46	3.84	3.99	11.66	12.10		13.55	
Van. Total Stock Market Fund	0.23	2.66	3.61	2.11	11.07	11.59	7.56	7.42	Aug-05
Custom Total Stock Index <sup>2</sup>	0.24	2.69	3.66	2.14	11.09	11.60	7.55	7.42	
Van. Total Bond Market Fund	1.95	2.38	5.54	6.15	4.08	3.79	5.18	4.64	Sep-05
Custom Total Bond Index <sup>3</sup>	1.89	2.32	5.52	6.12	4.07	3.76	5.13	4.62	
Van. Total Int'l Equity Fund	-0.96	0.22	0.05	-9.12	2.01	0.59	1.94	3.49	Sep-05
Custom Int'l Stock Index 4	-1.60	-0.37	-0.60	-9.16	2.24	1.61	1.54	3.12	
Van. Infl. Protected Sec. Fund	2.36	1.79	6.44	4.74	2.43	2.70	4.65	4.12	Sep-05
Barclays Cap. Treas Infl. Note	2.08	1.71	6.24	4.35	2.31	2.63	4.75	4.20	
Vanguard REIT Index	6.89	6.78	13.47	23.92	13.44	12.47	7.62	8.48	Sep-05
MSCI U.S. REIT	6.90	6.81	13.56	24.10	13.51	12.53	7.35	8.25	

<u>Notes:</u> 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; Barclays U.S. Aggregate Float Adjusted Index thereafter.
- 4. MSCI EAFE Index through June 2013 and FTSE Global All Cap ex US 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
AGE-BASED PORTFOLIOS									
Rappahannock Portfolio	1.09	1.90	4.42	-0.66				2.87	Jan-14
Rappahannock Benchmark	0.99	2.16	4.38	-0.53				2.88	
James River Portfolio	0.94	1.91	4.21	-0.39	5.80	5.87		6.14	Jan-11
James River Benchmark	0.84	2.06	4.10	-0.24	5.97	5.71		6.06	
Eastern Shore Portfolio	0.95	1.86	4.08	0.34	5.58	5.34		4.32	Feb-08
Eastern Shore Benchmark	0.87	1.99	4.02	0.56	5.74	5.18		4.22	
Alleghany Portfolio	0.93	1.90	4.08	0.94	5.29	5.11	4.66	5.03	Aug-05
Alleghany Benchmark	0.85	1.97	3.95	1.19	5.38	4.95	4.22	4.57	J
Chesapeake Portfolio	0.76	1.73	3.69	1.33	4.94	4.81	4.53	5.55	Jan-02
Chesapeake Benchmark	0.75	1.82	3.62	1.57	5.04	4.68	4.24	5.08	
Potomac Portfolio	0.72	1.54	3.48	2.21	4.59	4.41	4.41	4.42	Jan-00
Potomac Benchmark	0.85	1.73	3.54	2.52	4.69	4.32	4.11	3.27	
Southside Portfolio	0.81	1.47	3.17	3.24	3.99	3.73	4.22	4.23	Jan-00
Southside Benchmark	0.82	1.40	2.88	2.87	3.78	3.45	3.75	3.17	
Blue Ridge Portfolio	0.14	0.41	0.81	1.57	1.44	1.48	2.92	3.54	Jan-00
Blue Ridge Benchmark	0.09	0.28	0.54	0.99	1.07	1.09	2.30	2.48	
Piedmont Portfolio	0.14	0.41	0.81	1.57	1.43	1.76	2.99	3.68	Jan-00
Piedmont Benchmark	0.09	0.28	0.54	0.99	0.91	0.89	1.73	2.73	
PASSIVELY-MANAGED STATIC PORTFOLIOS									
Aggressive Growth Portfolio	0.18	1.82	2.94	-0.61	7.12	6.87	5.09	5.43	Jan-02
Aggressive Growth Benchmark	0.17	1.86	3.21	0.26	7.38	7.34	5.61	5.81	
Moderate Growth Portfolio	0.63	1.98	3.66	1.32	6.49	6.19	5.18	5.31	Jan-02
Moderate Growth Benchmark	0.66	1.97	4.07	1.96	6.47	6.35	5.54	5.59	
<b>Conservative Income Portfolio</b>	1.46	2.18	4.95	4.72	4.98	4.31	4.65	4.38	Jan-02
Conservative Income Benchmark	1.64	2.19	5.71	5.18	4.50	4.18	4.62	4.39	
Total Stock Market Portfolio	0.22	2.63	3.54	1.95	10.90	11.40	7.33	7.20	Aug-05
Ttl Stock Mkt Benchmark	0.23	2.65	3.58	1.99	10.93	11.42	7.33	7.20	8
<b>Total Bond Market Portfolio</b>	1.94	2.33	5.46	5.99	3.89	3.59	4.96	4.42	Sep-05
Ttl Bond Mkt Benchmark	1.88	2.29	5.44	5.97	3.91	3.59	4.93	4.41	
Ttl International Stock Portfolio	-0.97	0.18	-0.02	-9.26	1.85	0.42	1.74	3.28	Sep-05
Ttl Int'l Stock Benchmark	-1.62	-0.41	-0.68	-9.31	2.07	1.42	1.32	2.90	
<b>Inflation-Protected Securities Portfolio</b>	2.35	1.75	6.37	4.59	2.27	2.52	4.44	3.91	Sep-05
Inflation-Protected Benchmark	2.07	1.67	6.17	4.20	2.15	2.46	4.54	3.99	
REIT Portfolio	6.88	6.75	13.39	23.74	13.26	12.28	7.39	8.26	Sep-05
REIT Benchmark	6.89	6.78	13.48	23.95	13.34	12.35	7.12	8.02	Sop 35
ACTIVELY-MANAGED STATIC PORTFOLIOS									
Active Aggressive Portfolio	1.14	1.95	4.44					7.27	Oct-15
Active Aggressive Benchmark	0.99	2.16	4.38					7.75	
Active Moderate Portfolio	0.98	1.92	4.20					6.17	Oct-15
Active Moderate Benchmark	0.85	1.97	3.96					6.27	
<b>Active Conservative Portfolio</b>	0.93	1.77	3.77					4.93	Oct-15
Active Conservative Benchmark	0.86	1.74	3.54					4.78	
Socially Targeted Portfolio	-0.41	0.72	3.34	4.03	11.37	12.47		12.68	Nov-09
Socially Targeted Benchmark	0.25	2.42	3.76	3.84	11.49	11.92		13.36	

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

# **Attachment E**

# **Investment Policies and Guidelines for the Virginia529 prePAID and inVEST Programs**

# Virginia College Savings Plan Statement of Investment Policy and Guidelines For

Virginia529 prePAID<sup>SM</sup>

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# **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 prePAID ("prePAID" or the "Program"). This Statement represents the formal investment policy document for prePAID 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 prePAID.

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 prePAID'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 prePAID'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 prePAID. The custodian shall act as a fiduciary in the administration of the prePAID 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 prePAID 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;

<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.

# **Actuary for prePAID**

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 prePAID's funded status and attest to the appropriateness of prePAID'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 prePAID 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. prePAID 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.

- prePAID'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.
- prePAID's investment portfolio shall be invested and managed to provide sufficient liquidity to meet all reasonably anticipated operational requirements.
- prePAID'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 prePAID'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 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.

# <u>Individual Portfolio Guidelines – Fixed Income</u>

- 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 B for the benchmark assigned to each asset class).
- For the Core Fixed Income portfolios, the average quality of the total account should be Arated 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.
- 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 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 prePAID. 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. Either separately managed portfolios, commingled funds or mutual funds may be used in prePAID.

# SELECTION – GENERAL CRITERIA

When selecting investment managers for prePAID, 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 prePAID 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 prePAID 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.

<sup>&</sup>lt;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.

# 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.

<sup>&</sup>lt;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.

Measurement Period	Benchmark Comparison	Peer Group Comparison
Multiple rolling 3-year periods	• The total rate of return should exceed the return of the benchmark over most rolling periods. <sup>4</sup>	The total rate of return should exceed the median return of the fund's peer group over most rolling periods <sup>4</sup> .

For the managers that do not have a 3-year track record with prePAID, 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.

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 prePAID;
- 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.

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

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 prePAID and/or contributions to prePAID support the ongoing benefit and expense payments required by the Program.

- The Cash/Liquidity Policy for prePAID shall be integrated with the management of prePAID'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 prePAID, 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 prePAID, 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 December 8, 2016.

# **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:

Equities  Comprised of publicly traded U.S. and International Equity	<u>Target</u> 32.5%	Allowable Range 25.0 - 40.0%
Alternatives  Comprised of asset classes or strategies such as  Public or Private Real Estate, Private Partnerships or  Hedge Funds	15.0%	10.0 - 20.0%
Non-Core Fixed Income  Comprised of asset classes such as convertibles, high yield or emerging market debt	27.5%	22.5 - 32.5%
Core Fixed Income Comprised primarily of U.S. investment grade debt	25.0%	20.0 - 30.0%

Note: This allocation was approved by the Investment Advisory Committee and Board in 2009 and is reviewed annually in establishing the long-term investment return assumption for prePAID'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 prePAID portfolio.

Asset Class	Asset Group	<u>Benchmark</u>	Peer Group
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
International Equity	Public Equity	MSCI EAFE	International Equity Mutual Fund
Emerging Markets Equity	Public Equity	MSCI Emerging Markets	Emerging Markets Mutual Fund
Private Real Estate	Alternatives	NCREIF (various)	Private Real Estate
Market Neutral Hedge Fund of Funds	Alternatives	3-Month T-Bills + 350 bps	Market Neutral Hedge Funds
Private Partnerships	Alternatives	Russell 3000 + 300 bps	NA
Diversified Hedge Fund of Funds	Alternatives	3-Month T-Bills + 350 bps	Diversified Hedge Funds
U.S. High Yield Fixed income	Non-Core Fixed Income	Bloomberg Barclays Capital High Yield	U.S. High Yield Fixed Income
Convertibles	Non-Core Fixed Income	BofA Merrill Lynch Global 300 Convertibles	Convertibles
Emerging Markets Debt	Non-Core Fixed Income	JP Morgan EMBI (various)	Emerging Market Debt
U.S. Core Fixed Income Passive	Core Fixed Income	Bloomberg Barclays Capital Aggregate	NA
Bank/Leveraged Loans	Core Fixed Income	Credit Suisse Leveraged Loan Index	Fixed / Bank /Leveraged Loans
Mortgage Backed Securities	Core Fixed Income	Bloomberg Barclays Capital MBS Index	U.S. Fixed / Mortgage-Backed
Intermediate Term Fixed Income	Core Fixed Income	Bloomberg Barclays US Credit Corporate 5-10 Year	U.S. Fixed / Intermediate
U.S. Treasury Inflation Adjusted Fixed Income	Core Fixed Income	Bloomberg Barclays Capital U.S. TIPS	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 COMPOSITION

The table below outlines the composition of the blended benchmark used for the prePAID total fund.

Total Fund Benchmark							
	<u>Target</u>	Benchmark Component	Asset Class				
Equities	32.5%	MSCI All Country World Index	Public Equity				
Alternatives	15.0%						
		3-Month T-Bills + 350 bps	Market Neutral Hedge Fund of Funds				
		3-Month T-Bills + 350 bps	Diversified Hedge Fund of Funds				
		NCREIF ODCE (1Q in Arrears)	Private Real Estate				
		Russell 3000 + 300 bps	Private Partnerships				
Non-Core Fixed Income	27.5%						
		BofA ML Global 300 Convertibles	Global Convertibles				
		Bloomberg Barclays Capital High Yield	U.S. High Yield Fixed Income				
		JPMorgan EMBI	Emerging Markets Debt				
Core Fixed Income	25.0%						
		Bloomberg Barclays Capital Aggregate	U.S. Core Fixed Income Passive				
		Bloomberg Barclays Capital U.S. TIPS	U.S. Treasury Inflation Adjusted Fixed Income				
		3 Month T-Bills + 100 bps	Stable Value				

Actual allocation is reviewed monthly and component weightings are adjusted as needed.

# Virginia College Savings Plan Statement of Investment Policy and Guidelines For

Virginia529 inVEST<sup>SM</sup>

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T	PURPOSE	R	RESPONSIBIL	ITIES
L.				

#### **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 inVEST ("inVEST"). This Statement represents the formal investment policy document for inVEST 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 inVEST.

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

#### 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 inVEST'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 in VEST'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 inVEST. The custodian shall act as a fiduciary in the administration of the inVEST 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 inVEST 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;

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

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- 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
   inVEST'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 inVEST. 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 inVEST'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. inVEST PROGRAM STRUCTURE

## INVESTMENT OPTION STRUCTURE

The Virginia529 inVEST 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 inVEST. inVEST has no state residency requirements, no age limits and is open year round. The risk of investment losses in inVEST accounts rests with the participant. The primary investment objectives of inVEST are to offer a set of investment options that:

- allow inVEST 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 inVEST 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
- 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)
- Global REITs (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
- 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)
- Global REITs (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.

- 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.

#### STATIC SINGLE ASSET CLASS PORTFOLIOS

These portfolios will be offered such that they along with other inVEST 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. REITs (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 inVEST.

#### SELECTION – GENERAL CRITERIA

When selecting funds for inVEST, 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 inVEST 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 inVEST 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.

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

<sup>&</sup>lt;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.

Measurement Period	Benchmark Comparison	Peer Group Comparison
Multiple rolling 3-year periods	<ul> <li>The total rate of return should exceed the return of the benchmark index over most rolling periods.<sup>4</sup></li> </ul>	The total rate of return should exceed the median return of the fund's peer group over most rolling periods.  The total rate of return should exceed the median return of the fund's peer group over most rolling periods.

<sup>&</sup>lt;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 inVEST, 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 inVEST:

- the stability and depth of the investment professionals responsible for the management of this strategy;
- the suitability of its investment approach for inVEST;
- 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 inVEST, 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 8, 2016.

## **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						
inVEST Portfolio	January 2015	January 2018	January 2021	January 2024	January 2027	January 2030	January 2033	January 2036
2036 Portfolio Ages 0-3*		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
2033 Portfolio Ages 0-3	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	
2030 Portfolio Ages 4-6	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		-
2027 Portfolio Ages 7-9	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		•	
2024 Portfolio Ages 10-12	50% Stock 50% Fixed Income	40% Stock 60% Fixed Income	25% Stock 75% Fixed Income	0% Stock 100% Fixed Income		-		
2021 Portfolio Ages 13-15	40% Stock 60% Fixed Income	25% Stock 75% Fixed Income	0% Stock 100% Fixed Income		•			
2018 Portfolio Ages 16-18	25% Stock 75% Fixed Income	0% Stock 100% Fixed Income		-				
2015 Portfolio Over Age 18	0% Stock 100% Fixed Income	-	-					

<sup>\*2036</sup> Portfolio will open on January 1, 2017.

## APPENDIX B: BENCHMARKS & PEER GROUPS

The table below outlines the target benchmarks and peer groups for the inVEST portfolios. The table uses the initial target allocations as of January 1, 2015.

Portfolio	Category	Benchmark	Peer Group
80% Equity / 20% Fixed Income	Category  Age-Based Portfolios	17.5% S&P 500 / 11.25% Russell 2500/ 3.75% CRSP US Small Cap Index / 17.5% MSCI AC EAFE / 15% MSCI Emerging Markets / 15% FTSE EPRA-NAREIT Developed Real Estate / 5% Bloomberg Barclays Corporate High Yield / 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	<u>Group</u> 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 AC EAFE / 12.5% MSCI Emerging Markets / 10% FTSE EPRA-NAREIT Developed Real Estate / 5% Bloomberg Barclays Corporate High Yield / 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 AC EAFE / 10% MSCI Emerging Markets / 10% FTSE EPRA-NAREIT Developed Real Estate / 5% Bloomberg Barclays Corporate High Yield / 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 AC EAFE / 7.5% MSCI Emerging Markets / 7.5% FTSE EPRA-NAREIT Developed Real Estate / 5% Bloomberg Barclays Corporate High Yield / 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 AC EAFE / 5% MSCI Emerging Markets / 5% FTSE EPRA-NAREIT Developed Real Estate / 5% Bloomberg Barclays Corporate High Yield / 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 AC EAFE / 2.5% MSCI Emerging Markets / 5% FTSE EPRA-NAREIT Developed Real Estate / 5% Bloomberg Barclays Corporate High Yield / 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 Corporate High Yield / 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>	Benchmark Tool No. 11.0 April 10.1 April 10.	Peer Group
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	Citigroup 3-month T-Bills	NA
Socially Targeted Portfolio	Static, Single Asset Class Portfolio	S&P 500	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 AC EAFE / 2.5% MSCI Emerging Markets / 5% FTSE EPRA-NAREIT Developed Real Estate / 5% Bloomberg Barclays Corporate High Yield / 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 AC EAFE / 7.5% MSCI Emerging Markets / 7.5% FTSE EPRA-NAREIT Developed Real Estate / 5% Bloomberg Barclays Corporate High Yield / 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 AC EAFE / 15% MSCI Emerging Markets / 15% FTSE EPRA-NAREIT Developed Real Estate / 5% Bloomberg Barclays Corporate High Yield / 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)

Asset Class	<u>Benchmark</u>	Peer Group
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 Corporate High Yield Index	U.S. High Yield Fixed Income Managers
Global REITs/Actively-Managed	FTSE EPRA/NAREIT Developed RE Index	Global REIT Mutual Funds
International Equity/Actively-Managed	MSCI EAFE	International Equity Mutual Funds

# Attachment F Investment Policies and Guidelines for the Virginia529 ABLEnow

# Virginia College Savings Plan Statement of Investment Policy and Guidelines For

Virginia529 ABLEnow<sup>SM</sup>

#### TABLE OF CONTENTS

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T	PURPOSE	R	RESPONSIBIL	ITIES
L.				

#### **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;

<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.

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

<sup>&</sup>lt;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.

Measurement Period Multiple rolling 3-year periods	Benchmark Comparison     The total rate of return should exceed the return of the benchmark index over most rolling periods. <sup>4</sup>	Peer Group Comparison  The total rate of return should exceed the median return of the fund's
	rolling periods.	peer group over most rolling periods. <sup>4</sup>

<sup>&</sup>lt;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
- 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 December 8, 2016.

#### **APPENDIX A: BENCHMARKS**

The table below outlines the target benchmarks for the ABLEnow portfolios.

Manager/Portfolio	<u>Category</u>	Benchmark Benchmark
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

# Attachment G prePAID Sustainability Study



#### Virginia College Savings Plan Virginia529 prePAID Program Sustainability Study October 1, 2016

#### Introduction

The following narrative summarizes the findings and recommendations of Virginia529 management with respect to the future of the Virginia529 prePAID program (prePAID or the Program), as well as the research and discussion which is the basis for those findings and recommendations. The Virginia529 Board (the Board) authorized the sustainability study (the Study) in August 2015 and we undertook the Study starting in early 2016, working with our actuary, Milliman, and investment consultant, Mercer. Progress on the study was shared and discussed by the Audit and Actuarial Committee (AAC) at their July and August 2016 meetings and the Board was briefed on progress at its August 2016 meeting.

The Study was intended to examine the long-term sustainability of the Program in its current structure and consider alternative program models. The Study was undertaken from a position of strength at a time when the Program is more than 100% funded on an actuarial basis and performing well, adding new contracts at greater than anticipated numbers each year. Changes in higher education generally as well as continuing changes by the Virginia public universities in their tuition and fee policies and a growing disparity in costs among Virginia's public universities has created questions about the long-term viability of the current Program model. Some of those challenges are discussed below. The premise of the study was to analyze all options fairly and objectively, with no preconceptions.

#### **Key Findings and Recommendations**

The Virginia529 prePAID Program (prePAID) has been very successful, but required review in light of the potential negative impacts from:

- Unpredictable tuition growth;
- Changes in tuition and fee models (college funding models);
- Disparity among low- to high-tuition public institutions within Commonwealth;
- Customer expectations of prePAID in light of changes to funding models;
- Proposed legislation impacting tuition and fee models that may adversely impact prePAID;
   and
- Record low interest rates and modest projected investment returns.

As a result of the review, staff recommends that the Virginia529 Board:

- Adopt a single-tier contract model for the 2016-17 enrollment period; and
- Explore the development and implementation of an enrollment-weighted average tuition (WAT) payout model to replace the current Program structure. Any changes to the model will impact future contracts only.

At its August 2016 meeting, the Board approved the move to a single-tier contract model for the 2016-2017 enrollment period and we are developing Program disclosures and pricing on that basis. Action remains to be taken on a proposed new WAT model.

#### Virginia529 prePAID Program History and Growth

prePAID was opened and the first contract sold in 1996. Since its inception, prePAID has grown to over 64,000 contracts and \$2.4 billion in assets under management. The name has changed, the prices of the contracts have increased, and the program structure has changed, but participants may still purchase contracts to cover future tuition as defined in the contract as the normal, in-state, undergraduate, full-time tuition and mandatory fees assessed to all students.

prePAID is one of only eleven open prepaid programs nationwide and one of the best funded at 129% on an actuarial basis as of June 30, 2016. Since inception through fiscal 2016, prePAID has paid over \$1 billion in benefits and has assisted Virginia529 in fulfilling its mission of making college more accessible and affordable for Virginia's citizens.

Driven primarily by increases in tuition and fees at Virginia's public colleges and universities, prePAID program contract prices have grown substantially since inception. For example, in 1996 the cost of a four-year contract for a kindergartner was \$14,176, while the cost for that same contract in the 2015-16 enrollment period was \$67,800. That represents a 378% increase.

In 2013 prePAID revised its contracts to make them more affordable by switching to semester contracts from one-year contracts, reducing by half the entry price point. In addition, it changed the name of the university and community college contracts to Tier I and Tier II. prePAID had always sold contracts for use at universities or community colleges, and the contracts had always been convertible, but the conversion ratio had not been adjusted from inception to 2013. Changing the names and modifying the conversion ratio annually was designed to emphasize the ability to convert contracts to use as needed.

#### **Experience Study 2014**

The two most significant assumptions used to prepare prePAID'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 2014, Milliman, VA529's actuary, completed an experience study which examined prePAID transactions over a ten-year period from July 2003 through June 2013. The purpose of the study was to evaluate actual transaction history to determine whether the assumptions used (other than the investment return and future tuition growth) should be revised based on actual experience. The assumptions tested included (i) contract cancellations and rollovers, including transfers to inVEST which were primarily utilized to provide the maximum benefit to those students attending lower-priced Virginia schools; (ii) the proportion of payouts going to Virginia universities and community colleges; (iii) the year, relative to the expected matriculation year, in which benefits were first used; and (iv) the cost of payouts to Virginia universities and community colleges relative to enrollment-weighted average tuition. As a result of the experience study, the Board adopted several changes in the assumptions in August 2014, which were incorporated into the 2014 actuarial valuation report and the 2015-16 enrollment period contract pricing. The changes in the assumptions had a positive impact on the funded position.

In addition to the experience study, Milliman performed an asset share analysis of prePAID. The asset share analysis reflects the investment return (both positive and negative) earned on all contributions, net of payouts, over the life of the program. By evaluating asset shares of different contract types, payment types and payout types, Milliman determined whether a particular category collected enough money and earned a sufficient rate of return to be able to pay the benefits for the respective category. The results showed that contracts that were used in full at Virginia public universities and colleges produced negative asset shares, contracts redeemed for Virginia private college roughly covered costs, and contracts redeemed for use at out-of-state colleges, or due to cancellation and/or rollovers, produced positive net asset shares. In other words, while the overall structure of the prePAID Program was producing positive asset shares, the basic benefits paid for in-state public schools was producing negative asset shares. This could largely be attributed to increases in tuition outpacing assumptions used to set prices.

#### **Challenges Facing prePAID:**

#### **Tuition Growth**

As a result of many years of general fund budget reductions to support higher education, Virginia public colleges and universities have increased tuition and fees thereby adversely impacting the accessibility and affordability of public higher education. For example, according to Milliman's 2016 prePAID valuation report, enrollment-weighted university tuition and fees increased by 7.9% annually over the last 15 years. Enrollment-weighted tuition and fees at community colleges grew 10.6% annually during that same period. More importantly, however, were fluctuations in the annual increases for four-year universities ranging from as high as 22.1% to as low as 3.7% during that 15-year period. This high variability in historical annual increases has added to the difficulty in forecasting tuition increases.

According to the State Council of Higher Education for Virginia (SCHEV), the student share of the cost of education is at a record high (least affordable) level<sup>1</sup>. In FY 2016, the average total charge for an in-state undergraduate student living on campus at a four-year institution is estimated to be 47.6% of per capita disposable income. This measure of affordability has been climbing since reaching the low point (most affordable) of 31.8% in FY 2001 following several years of state-mandated tuition reductions and controls. As a result, on average, in-state undergraduate students are paying more than half of the cost of their education. Students (or parents) are paying 20 percentage points higher than the targeted 33% of student cost share, while the state support is 20% points lower than the target of 67% identified in the state's official tuition policy.

Also according to SCHEV, a national comparison of in-state undergraduate tuition and fees at public institutions in FY 2015-16 shows that tuition and fees at Virginia institutions ranked 12<sup>th</sup> highest in the category of doctoral/research institutions, 6<sup>th</sup> highest in the category of comprehensive institutions, and 12<sup>th</sup> highest for two-year colleges<sup>2</sup>. According to JLARC, Virginia ranks 8<sup>th</sup> among the other states in both the cost of in-state tuition and fees at public four-year universities and in the percentage change for in-state tuition and fees at public four-year institutions from 2010-11 to 2015-16 (the higher rankings being the less affordable).<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> SCHEV 2016-17 Tuition and Fees at Virginia's State-Supported Colleges and Universities

<sup>&</sup>lt;sup>2</sup> SCHEV 2016-17 Tuition and Fees at Virginia's State-Supported Colleges and Universities

<sup>&</sup>lt;sup>3</sup> JLARC Virginia Compared to the other States 2016

#### Changes in Tuition and Fee Models and Price Disparity Among Institutions

As a result of general fund budget reductions to support higher education, Virginia public colleges and universities have also been required (and asked) to explore different funding models in order to increase revenue. Institutions have responded in a variety of ways including modifying their tuition and fee models. One example is the use of a fixed-rate or guaranteed tuition plan, under which institutions charge a fixed or flat rate to first-time, full-time incoming freshmen for four or more consecutive years.

The College of William & Mary instituted the W&M Promise<sup>4</sup> in FY 2014 in which W&M establishes tuition annually for all incoming Virginia undergraduates and promises that once instate tuition is set for an incoming class, the number will remain stable for the next four years. The W&M Promise does not apply to fees and other costs, which may rise. In addition to fixing tuition, W&M reduced loans and increased need-based grants for Virginia students. The W&M Promise impacted prePAID by increasing the amounts paid to W&M for incoming freshmen by 13.95%, 14.18%, 9.7%, and 9.6% in 2013, 2014, 2015 and 2016, respectively. In dollars the tuition and mandatory fees paid by Virginia529 increased from \$13,570 in 2012 to \$21,234 in 2016.

In FY 2015, the University of Virginia instituted its Affordable Excellence program under which the University modified its need-based loan and grant packages to improve affordability. Included in the program is an optional Guaranteed Tuition Plan under which a first-year, entering full-time undergraduate student residing in Virginia and eligible for in-state tuition may opt to pay a fixed base tuition rate during their undergraduate career (not to exceed 8 regular session fall and spring terms). The Guaranteed Tuition Plan does not impact prePAID since under the contract Virginia529 is obligated to pay the tuition and fees assessed to all students and Virginia529 will not adjust its payments to UVa for those students participating in the Plan.

Finally, using a different model, Virginia Commonwealth University changed from block pricing to credit-hour (non-block) pricing in FY 2014 for students entering in the fall of 2013. prePAID benefits paid to VCU for block pricing prior to the change covered tuition and mandatory fees based on a range of 12-18 credit hours. In 2013 when VCU changed to credit-hour pricing, Virginia529 modified its payments to be consistent with payouts for other credit-hour schools – paying VCU an amount to cover tuition and fees based on 15 credit hours for students taking 12-15 credit hours per semester. Since prePAID covers up to 18 credit hours, for students taking from 16 to 18 credit hours, Virginia529 pays the additional credit hour charges up to 18 hours.

<sup>&</sup>lt;sup>4</sup> http://www.wm.edu/sites/wmpromise/?svr=web

prePAID 2016 Sustainability Study October 1, 2016 Page 6

The effect of this change on Virginia529 is that the amount required to cover a full-time student (up to 15 hours) under the credit-hour structure is about \$1,900 more per academic year than required under the block pricing structure for the 2016-17 academic year.

Over the years since prePAID began, institutions have added fees in addition to tuition to cover certain costs. These include fees to repay debt issued by the schools to build parking or to improve academic and other facilities such as student unions. They also include fees intended to cover the additional costs of certain programs such as engineering, nursing, art, etc. Some fees are mandatory and are assessed to all students. Other fees such as program, course, or major-specific fees are only assessed to applicable students. In addition, certain institutions have also begun charging "differential tuition" to students enrolled in certain high-cost programs such as business. Examples of differential tuition include UVA's Commerce School and James Madison's business courses.

Tuition as paid by prePAID under the contract is defined as the normal, in-state, undergraduate, full-time tuition and mandatory fees assessed to all students. Tuition does not include program, course or major-specific fees or charges including differential tuition. Thus, as institutions have added fees and differential tuition to address specific costs, there may be a substantial difference between the amount of tuition and fees invoiced to the parents versus what is covered by prePAID. This has resulted in frustrated customers who purchased contracts in the late 1990s before these changes occurred. These customers are sometimes confused when they learn that the contract does not cover certain course or major specific fees, or differential tuition. While Virginia529 has been consistent in interpreting the contract and has paid accordingly, and most of the prePAID account holders who have utilized their benefits are very pleased, there is a vocal small minority who have disagreed with the contract interpretation.

Changes in models along with increases in tuition and fees, have resulted in a growing disparity in tuition and fees charged among institutions. For example, in the 2000-01 academic year, the tuition and fees paid by prePAID ranged from \$2,950 to \$6,148 versus \$8,472 to \$21,234 for the 2016-17 academic year. The percentage difference between the lowest and highest cost schools remained relatively constant from 2000-01 through 2012-13 at about 2-times. Since then, the difference has grown to 2.51-times reflecting the increase in the highest cost relative to the lower cost schools. The cost disparity is also reflected in the enrollment-weighted average tuition percentage which remained relatively stable at over 60% of the highest cost school through 2013-14 having dropped to slightly below 60% for the first time in 2015-16. In 2016-17 it

dropped further to 56%. While small in percentage terms, these changes amount to larger dollars being paid to those students attending the higher priced schools than in the past<sup>5</sup>.

#### Impact on prePAID Contract Sales

Tuition increases and changes in tuition and fee models, have negatively impacted prePAID contract sales as the cost of the contracts has risen to keep pace with tuition inflation in Virginia. As a result, Virginia529 is selling fewer contracts that cover the full four years and is selling more one- and two-semester contracts. When prePAID first opened in 1996, about 73% of the contracts sold covered four years of college. By 2016, only about 20% of the contracts sold covered four years or eight semesters. About 28% of contracts sold in the latest enrollment period cover only one semester<sup>6</sup>. Those changes in the types of contracts sold are directly attributable to the contract's affordability for the average Virginia family.

According to SCHEV, adjusting for inflation, average tuition and mandatory fees at public four-year institutions in Virginia increased by 85% between 1995 and 2015. However, disposable income increased by only 32% over the same period<sup>7</sup>. Thus, rising tuition has adversely impacted both affordability and accessibility to higher education.

#### Legislative Proposals

Over the last few years, in response to constituent concerns, there has been an increase in legislation proposed to address rising tuition and fees. There were nine such bills introduced during the 2015 and 2016 Sessions combined, two of which became law. Some of these bills were designed to address tuition and fee models and others to increase transparency for parents and prospective students. In some cases, they may have adversely impacted prePAID. Virginia529 responded by working directly with legislators and in collaboration with the public colleges and universities to provide information to Virginia's general assembly members.

#### Record Low Interest Rates Impacting Investment Returns

In June 2016, Virginia529's Board approved the long-term investment rate of return assumption for use in the 2016 prePAID valuation report and contract pricing at 6.25%. Over time the rate

<sup>&</sup>lt;sup>5</sup> See Exhibit, Virginia Public University Tuition and Fee Ranges

<sup>&</sup>lt;sup>6</sup> See Exhibit, prePAID Semester Contract Sales by Type as a Percent of Total Contracts

<sup>&</sup>lt;sup>7</sup> SCHEV, Fixed-rate Tuition Plans: A Survey in Response to Senate Bill 806, August 2015

has been reduced from as high as 8.0%<sup>8</sup>. As of June 30, 2016, the prePAID portfolios return since inception was 6.10%. The assumed rate of return impacts prePAID's funded status as well as contract prices.

Negative interest rate policies among central banks globally may be the norm over the short-to mid-term. Global central banks continue to increase money supply and suppress rates to spur growth and inflation. In fact, over the last three years, negative yielding developed-market sovereign bonds have gone from zero to more than one-third of all outstanding bonds. In August, the Bank of England cut its benchmark interest rate to the lowest level in its 322-year history and revived its bond-buying program to cushion the U.K. economy. Global investors continued to buy U.S. Treasuries and other developed-market sovereign debt as a safe haven. In early July, the yield on the ten-year U.S. Treasury bond set a new record yielding only 1.367%, and the yield on Japan's 20-year government bond fell below zero for the first time ever. The long-term outlook for global interest rates remains low and as a result, the forecast for returns on the prePAID portfolio is not expected to increase beyond the current assumed return.

#### Goals of the prePAID Sustainability Study:

In late 2015, Virginia529's Board authorized a study, to be completed in 2016, to examine the sustainability of the prePAID program, considering all options, including:

- i. Maintain the current program unchanged;
- ii. Maintain the status quo but with minimal modifications (e.g., single-price model; single-tier pricing);
- iii. Close the current program to new enrollment and manage existing contracts through depletion;
- iv. Consider a new structure, such as weighted average payout program for new contracts; and/or
- v. Consider a new structure that includes risk sharing among Virginia529 and Virginia public higher education institutions for new contracts. Florida, Texas and Private College 529 provide possible templates for this model.

<sup>&</sup>lt;sup>8</sup> See Exhibit, prePAID Long-term Investment Return Assumptions

#### **Options Consideration and Recommendations:**

In July and August of 2016, Virginia529 staff and Milliman presented thoughts and issues to Virginia529's Audit and Actuarial Committee (A&AC or Committee) on the options listed above. The Committee reviewed and discussed each option. Staff and Milliman did not recommend maintaining the current program unchanged or closing prePAID to new enrollment. The purposes behind the Sustainability Study argued for modifications at some level. Closing prePAID without fully exploring other options would have been counter to Virginia529's mission to make college more affordable and accessible for Virginia's citizens. Inasmuch as 529 plans began as prepaid tuition programs and since Virginia529's prePAID Program had been successful, closing prePAID could not be justified. Closing prePAID would prohibit Virginia529 from strengthening the Program, if needed, from new contract sales. And, closing prePAID to new sales without attempting modifications, would not alleviate risks associated with the existing contracts. As a result, Virginia529 staff recommended examining modifications to prePAID as opposed to closing prePAID.

In 2013 prePAID contracts were revised to make them more affordable by switching to semester contracts from one-year contracts to reduce the entry price point. In addition, Virginia529 changed the name of the university and community college contracts to Tier I and Tier II, respectively. prePAID had always sold contracts for use at universities or community colleges, and the contracts had always been convertible, but the conversion ratio had not been adjusted from inception to 2013. Changing the names and modifying the conversion ratio annually was designed to emphasize the ability to convert contracts to use as needed. The Tier II contracts have never appealed to prePAID participants, despite their lower cost. During the latest enrollment period, less than 5% of the contract sold were Tier II contracts. Only 1.1% of contracts sold represented two+two contracts (i.e., four semesters of both Tier I and Tier II) and only 1.6% represented a single Tier II semester contract.

After reviewing the data and considering the marketing and administrative simplifications, staff recommended moving to a single-tier contract. A conversion formula would continue to be required and communicated to customers.

Virginia529 staff and Milliman reviewed different risk-sharing models including the Private College 529 Plan for private colleges and universities, the Texas Tuition Promise Fund run by the Texas Prepaid Higher Education Tuition Board, and the Florida Prepaid College Program run by the Florida Prepaid College Board. The key feature of each of these plan/programs is that they shift some of the risk for growth in covered tuition and fees to the underlying higher education institutions. Virginia has a decentralized public higher education structure – fifteen

autonomous four-year higher education institutions and Board of Visitors with the ability to hire and fire presidents, set tuition and fees, and make the majority of decisions related to academic and non-academic aspects of the institutions. Thus, unlike other states with prepaid programs who can manage programmatic changes through a centralized state system, changes to Virginia529 prePAID that would include institutional risk sharing, would need to be embraced by each institution. In addition, inasmuch as Virginia529 has never dictated tuition levels, and given the collaborative nature of Virginia529's relationship with the institutions, staff recommended against developing a risk-sharing model.

Finally, staff and Milliman reviewed the enrollment-weighted average tuition (WAT) payout model. Under this model, prePAID would move from paying actual tuition and mandatory fees, as further defined in the contracts, for those students attending Virginia public institutions and paying a different amount for those students attending in-state private schools or out-of-state institutions, to paying WAT no matter where the student attended college. There are several advantages to moving towards a WAT payout structure including:

- Reduced contract price versus the existing program structure;
- Reduce the risks listed above including very high payouts to certain institutions;
- Eliminate the wide dispersion of payment amounts to different institutions in Virginia;
- Reduce or eliminate the issues with differential tuition;
- Allow the benefits to be used for all qualified higher education expenses (books, room and board, equipment) rather than just tuition and mandatory fees;
- Allow for payment before the add/drop date thereby providing more flexibility and efficiency to parents and students; and
- Appeal to parents who are uncertain as to where their children will attend school and therefore hesitate to lock into a Program which heavily encourages in-state public school attendance.

In order to develop a WAT program, Virginia529 will need to:

- Garner support from Virginia's public higher education institutions, the Administration and the General Assembly;
- Gather input from Virginia's private institutions of higher education;
- Determine the proper unit on which to price contracts (currently use a one-semester unit);
- Carefully define WAT (perhaps in conjunction with SCHEV);

<sup>&</sup>lt;sup>9</sup> See Exhibit, Current prePAID Payout Structure and Change to WAT

- Consider a single-price model;
- Determine the timing of the introduction of the new prePAID WAT program;
- Modify its current enabling legislation to provide for a new program model;
- Revise all marketing and communication materials; and
- Make other programmatic decisions with respect to the WAT program and the existing program.

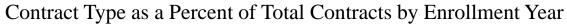
Virginia529 staff and Milliman both recommend exploring the development and implementation of a WAT model and developing a proposed plan for such a program during 2017. The Board will receive progress reports during 2017 with a view to introducing relevant legislation during the 2018 session of the General Assembly.

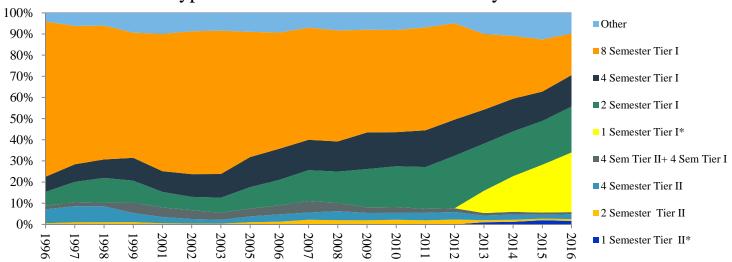
Virginia529 staff will make the following recommendations to the Board on October 6, 2016:

- Adopt a single-tier contract model for the 2016-17 enrollment period; and
- Authorize Virginia529 staff and consultants to explore the development and implementation of an enrollment-weighted average tuition payout model and develop a plan of implementation in calendar year 2017.

## prePAID Semester Contract Sales by Type





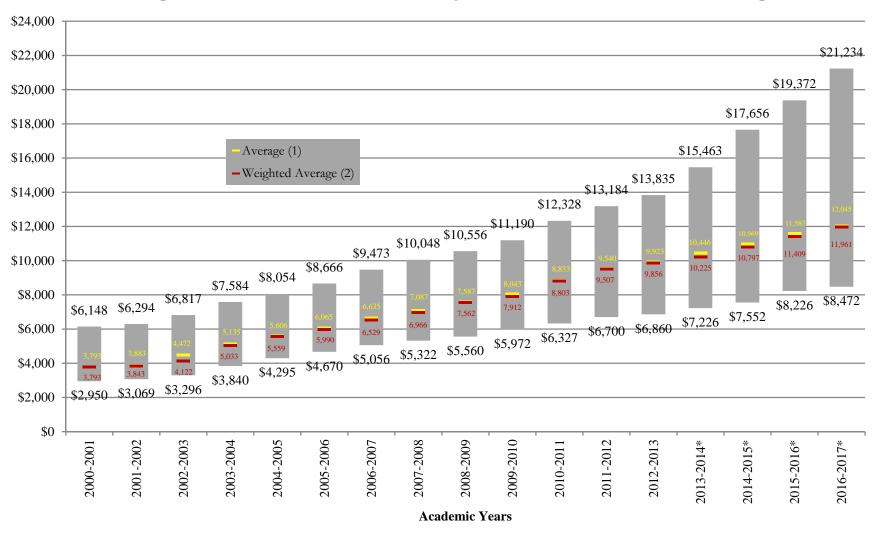


Type of Contract	1996	1997	1998	1999	2001	2002	2003	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1 Semester Tier II*	N/A	1.0%	1.2%	2.0%	1.6%														
2 Semester Tier II	0.5%	1.0%	1.0%	1.1%	0.5%	0.4%	0.4%	1.0%	1.3%	2.2%	2.0%	1.9%	2.2%	1.9%	2.3%	1.1%	1.0%	0.7%	0.9%
4 Semester Tier II	6.6%	7.6%	7.5%	4.3%	2.9%	2.2%	1.8%	2.7%	3.5%	3.4%	4.3%	3.5%	3.3%	3.5%	3.6%	2.3%	2.5%	1.8%	2.2%
4 Sem Tier II+ 4 Sem Tier I	1.5%	2.0%	1.7%	4.9%	4.5%	4.1%	3.4%	3.7%	4.2%	5.5%	3.9%	2.7%	2.8%	1.9%	1.8%	1.2%	1.3%	1.1%	1.1%
1 Semester Tier I*	N/A	10.5%	16.9%	22.6%	28.2%														
2 Semester Tier I	6.7%	9.5%	11.8%	10.4%	7.4%	6.3%	7.1%	10.2%	12.1%	14.6%	14.8%	18.1%	19.2%	19.8%	24.8%	22.2%	21.2%	20.7%	21.7%
4 Semester Tier I	7.1%	8.3%	8.7%	10.8%	9.8%	10.7%	11.2%	14.2%	14.7%	14.3%	14.3%	17.3%	16.1%	17.4%	17.1%	16.0%	15.4%	13.9%	14.9%
8 Semester Tier I	73.4%	65.4%	63.3%	59.2%	64.9%	67.5%	67.8%	59.2%	54.9%	53.0%	52.4%	48.5%	48.3%	48.6%	45.5%	35.7%	29.7%	24.6%	19.7%
Other	4.1%	6.2%	6.0%	9.3%	9.9%	8.7%	8.4%	9.0%	9.3%	7.0%	8.3%	8.0%	8.1%	6.9%	4.9%	10.0%	10.9%	12.6%	9.8%

<sup>\*\*</sup>Beginning with 2013 enrollment period contracts offered on a semester basis as opposed to full year



## Virginia Public University Tuition and Fee Ranges



(1) Simple average of tuition and fee amounts paid from prePAID per academic year

<sup>(2)</sup> Enrollment-weighted average tuition and fees as shown in Virginia529 prePAID Annual Valuation report \*Highest tuition paid represents the highest Virginia529 payout based on student cohorts under the William & Mary Promise



# prePAID Long-term Investment Return Assumptions

Year	Return
1996 - 2000	8.0%
2001	7.5%
2002	7.0%
2003	6.75%
2004 - 2011	7.0%
2012 - 2014	6.75%
2015 - 2017	6.25%



### **Current prePAID Payout Structure and Change to WAT**

76%

#### **VA Public**

Actual tuition at specific university

7.6%

#### **VA Private**

Highest VA Public Tuition but not more than all payments plus actual portfolio return 11.4%

#### **Out of State**

Average VA Public Tuition but not more than all payments plus money market return

Not less than all payments plus money market return

#### VA Public

Recent payouts have ranged from 73% to 170% of WAT with an average of about 107% of WAT

#### **VA Private**

Recent payouts have ranged from 70% to 159% of WAT with an average of about 106% of WAT

#### **Out of State**

Recent payouts have ranged from 43% to 111% of WAT with an average of about 70% of WAT

Change to

**VA Public** 

100% of WAT

Change to

**VA Private** 

100% of WAT

Change to

**Out of State** 

100% of WAT

Pre-matriculation refunds could continue to be "all payments plus money market return".

