Commonwealth of Virginia June 11, 2018

Report to the Governor and the General Assembly of Virginia

Virginia529 Oversight Report 2018





Joint Legislative Audit and Review Commission

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Overview

The Virginia College Savings Plan (Virginia529) administers the state's tax-advantaged savings programs. The programs are authorized by Sections 529 and 529A of the Internal Revenue Code and sponsored in 49 states and the District of Columbia. Virginia529 administers a prepaid tuition program, two education savings programs, and a disability savings program.

Virginia529's Prepaid529 program allows participants to purchase contracts that cover the future cost of college tuition and fees, as defined in the contracts.

The education savings programs—Invest529 and CollegeAmerica—provide participants with different options to save for educational expenses. Funds from the savings programs can be used to pay for qualified educational expenses. The programs offer federal and state tax advantages on contributions and investment earnings.

The disability savings program—ABLEnow—provides tax-advantaged savings accounts for eligible individuals with disabilities. Funds from the program can be used to pay for qualified disability expenses, such as education, medical care, housing, and transportation. ABLEnow opened to customers in 2016. Like Virginia529's education savings programs, ABLEnow offers federal and state tax advantages on contributions and investment earnings.

Virginia529 is the largest 529 plan in the country, with \$69.1 billion in assets and a 21 percent share of the national market as of March 31, 2018. Assets of \$62 billion are held in the CollegeAmerica program, managed by third-party program manager under contract with Virginia529. Approximately 10 percent of CollegeAmerica's accounts are held by Virginia residents.

TABLE 1 Virginia529 programs

	Type of program	Accounts	Assets (\$)
Prepaid tuition		-	
Prepaid529	Contracts for future tuition & fees	63,858	\$2.7B
Education savings			
CollegeAmerica	Advisor-sold investments	2,290,665	\$62B
Invest529	Direct-sold investments	272,299	\$4.4B
Disability savings			
ABLEnow	Direct-sold investments	2,615	\$8.4M
ABLEAmerica	Advisor-sold investments	*	*

SOURCE: Virginia529 program data as of March 31, 2018.

NOTE: CollegeWealth, closed to new participants in FY17, has 12,590 legacy accounts and \$51 million in assets respectively.

*Virginia529 is scheduled to launch the ABLEAmerica program in 2018.

Prepaid529 contracts

cover tuition and fees for a set period, typically ranging from one to eight semesters at a university or college.

The Prepaid529 contract defines tuition and fees as the normal, full-time, in-state, undergraduate, mandatory fees assessed to all students. Contracts do not cover additional tuition, fees, or charges associated with a specific program, course, or major.

Payouts for students attending private institutions in Virginia or out-of-state institutions are calculated using contract payments plus a rate-of-return as defined by program policy.

Virginia529's **operating revenue** is generated by fees (mainly from CollegeAmerica and Invest529) and used to pay operating expenses.

The **net operating revenue**—any revenue that remains—is allocated to the Prepaid529 fund at the end of each fiscal year.

1. Prepaid529 program

Prepaid529 is a defined benefit program that offers prepaid tuition contracts to Virginia residents. Prepaid529 benefits pay for tuition and fees at public colleges and universities in Virginia, under specific terms that are defined in the contracts (sidebar). Prepaid529 benefits do not cover certain categories of expenses, such as additional charges to students enrolled in business school and other high-cost programs. Prepaid529 benefits can be used at private and out-of-state institutions, but are not guaranteed to cover the full cost of tuition and fees at those institutions. The Prepaid529 program paid \$168 million in benefits in FY17.

Prepaid529 participation

Participation in the Prepaid529 program has declined over the past 10 years (Figure 1). Two measures of participation are the number of participant accounts and the number of new contracts sold. The number of Prepaid529 accounts declined by 11 percent over the 10-year period from FY09 to FY18. Prepaid529 contracts are sold in semester units. While the total number of contracts purchased each year has declined by just six percent from FY09 to FY17, the total number of semester units included in those contracts has declined by 43 percent through FY17. (New contract sales data is not yet available for FY18.)

Participation in Prepaid529 has declined as the cost of contracts increased and consumers shifted toward more affordable savings vehicles such as Invest529. The price of a Prepaid529 contract to cover eight semesters at a four-year university increased from \$44,060 in 2008-09 to \$67,880 in 2017-18, primarily due to the rising cost of tuition.* Price increases have made the Prepaid529 program less affordable to many Virginians, whose median annual household income was estimated at approximately \$68,000. College savings programs give participants the flexibility to contribute at their own pace rather than commit to higher-cost prepaid contracts.

Part of the decline in Prepaid529 participation is attributable to timing. Because the initial demand was strong, many Prepaid529 accounts were created shortly after the program was established in 1996. Those accounts are now being used, resulting in a surge in account drawdowns and closures as the program reaches maturity.

^{*} Price for contract purchased for child aged kindergarten through 4th grade. Contract prices vary depending on age of child for whom the contract is purchased.

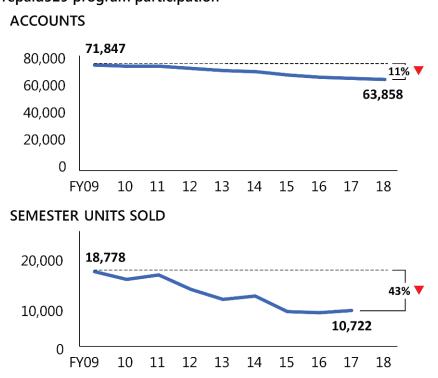


FIGURE 1 Prepaid529 program participation ACCOUNTS

SOURCE: Virginia529 program data.

NOTE: Contracts are sold in increments of eight semester, four semester, two semester, and single semester. Semester units sold does not include contract sales that are a combination of two or more different types of semester increments. Figures reported as of June 30 except for 2018, which is as of March 31. Contract sales data not yet available for FY18 as of time of reporting.

Prepaid529 fund investment performance and benchmarking

The Prepaid529 program held \$2.7 billion in assets as of March 31, 2018. Fund assets are managed within a single enterprise fund and are divided into three asset classes: fixed income, public equity, and alternatives (Figure 2). Assets in the Prepaid529 fund have increased by 25 percent over the past five years. During this time, net additions from investment returns, contract sales, and net operating revenues (sidebar) have generally exceeded benefit payouts and other deductions.

The Virginia529 board and its investment advisory committee oversee the Prepaid529 fund. The board determines the fund's overall asset allocation. The investment advisory committee determines what investment strategies should be implemented within each asset class and selects and retains private investment management firms to implement those strategies. Virginia529 staff and a consulting firm oversee these external managers, monitor their performance, and make recommendations to the board and investment advisory committee. The board has not made any significant changes to asset allocation in the past two years since the last asset-liability study was completed.

Virginia529 investment advisory committee is composed of the board chairman, chief executive officer, and at least four investment professionals appointed by the board chairman. All members have voting privileges.

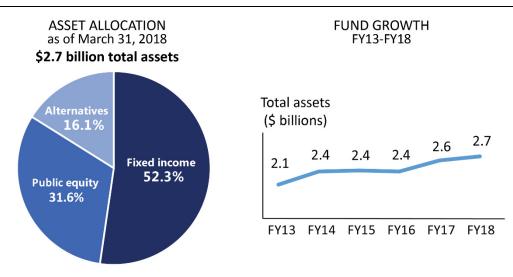


FIGURE 2 Prepaid529 fund asset allocation and growth

SOURCE: Virginia529 program data.

NOTE: Total fund assets as of March 31, 2018. All other fiscal years are reported as of June 30.

Prepaid529 investment benchmarks revised

Virginia529 staff and its investment consultant conducted an internal review of Prepaid529 fund benchmarks during 2017 and 2018. This review resulted in a revision of fund benchmarks, approved by the investment advisory committee and board, and implemented as of March 31, 2018. The benchmark review, which was part of the investment advisory committee's annual scope of work in 2017, was in response to a recommendation in JLARC's 2017 report, *Prepaid529 Investment Management*. The report recommended that the board contract with a third party to conduct an independent review of benchmarks to ensure that fund benchmarks are the appropriate indicators against which to measure fund performance.

Virginia529 modified the benchmarking of the Prepaid529 fund across all managers, asset classes, and the total fund as a result of its internal benchmark review. Each of the fund's individual asset managers is now benchmarked against an index based on the exact strategy being implemented by the manager. According to Virginia529 staff, the revised benchmarks allow external stakeholders, such as the General Assembly, to assess fund performance by directly comparing performance of each individual manager and each asset class to its corresponding benchmark. Asset class-wide performance is measured relative to a "composite" benchmark that is calculated by taking the weighted average of the benchmarks for individual managers. Likewise, the total fund benchmark is the weighted average of the benchmarks for the fund's individual asset classes.

Virginia529 previously used benchmarks that reflected the fund's basic asset allocation, policy, and strategy. According to Virginia529 staff, deviations of fund performance

A **benchmark** is an objective standard, based on comparable indexes or funds, against which the investment performance of a fund can be measured. from the previous benchmarks could be explained with additional context about fund strategy, manager selection, and risk tolerance. However, without this context, it was difficult for external stakeholders to assess fund performance merely by comparing fund performance to fund benchmarks. For example, some of the past deviation in the performance of the public equity asset class from its benchmark could be partially explained by a tilt towards emerging market stocks, which was not fully reflected in the previous benchmark.

Prepaid529 fund performance was mixed

The Prepaid529 fund's investment returns were mixed relative to the new benchmarks adopted for the fund and relative to the long-term return assumption. The Prepaid529 fund's investments achieved a return of 8.2 percent for the one-year period ending March 31, 2018. The total fund underperformed its benchmarks in the one-, three-, and five-year periods, but met or outperformed its benchmark for the 10-year period and since inception. The fund's one-year return (8.2 percent) and since-inception return (6.3 percent) have exceeded the 6.25 percent long-term rate of return that has been assumed by the Virginia529 board for its investments (Table 2).

Virginia529 staff, the investment advisory committee, and the program's investment consultant indicate that the fund is defensively positioned with the intention of protecting assets in down markets and periods of market volatility. According to these parties, underperformance of the fund relative to benchmarks in the near term is expected as the markets have experienced a period of high market growth and lower volatility. The defensive posture is aimed at helping the fund outperform the market in the long term and achieve the program's assumed long-term rate of return.

Fixed income. The fixed income program is the largest Prepaid529 asset class, with \$1.4 billion in assets. The program primarily consists of U.S. dollar-denominated securities that pay a specific interest rate (government bonds, corporate bonds, and U.S. treasury bills), high yield bonds, convertible bonds, and emerging market debt. Fixed income investments typically exhibit lower volatility relative to most other asset classes and are expected to generate steady returns even in down equity markets. The fixed income portfolio has met or outperformed its benchmarks for all periods, and nearly all managers outperformed their individual benchmarks.

TABLE 2 Prepaid529 fund performance

FUND INVESTMENT PERFORMANCE

for the period ending March 31, 2018

	FY to date	1 year	3 years	5 years	10 years	Since inception
Total fund	5.3%	8.2%	5.3%	5.3%	5.4%	6.3%
Benchmark	5.7	8.6	5.6	5.5	5.4	5.8
Fixed income	1.8	3.2	3.4	3.0	4.8	5.5
Benchmark	1.2	2.6	3.2	2.7	4.8	5.4
Public equity	10.1	15.3	7.4	8.4	6.7	7.1
Benchmark	11.8	16.7	8.4	8.9	6.4	6.2
Alternatives	7.0	10.6	6.7	6.3	3.7	5.1
Benchmark	8.7	12.6	7.5	7.2	3.5	4.9

SOURCE: Virginia529 program data.

NOTE: Performance as of March 31, 2018 and reported relative to new custom benchmarks. Total fund, fixed income, and public equity have inception date of October 1997; alternatives inception was May 2005.

Public equity. Public equity is the Prepaid529 fund's second-largest asset class, with \$848 million in assets. The program consists of stocks and other equity securities for publicly traded companies in the U.S. and abroad. Public equity investments are typically higher volatility than bonds but offer potential for greater long-term growth. The public equity portfolio underperformed its benchmarks for the one-, three-, and five-year period, and outperformed its benchmark for the 10-year and since-inception periods.

Virginia529 staff explained that the fund's public equity investment portfolio can be expected to underperform benchmarks in the current market environment. The portfolio is designed to outperform in volatile and down markets by having a more defensive posture. The past several years have been a period of particularly high public equity returns and lower market volatility.

Alternatives. Alternative assets are the fund's smallest asset class with \$432 million in assets under management. Alternatives include investments in real estate, private equity (investments in privately held companies), and hedge funds (unique strategies to provide higher returns, more consistent returns, or lower risk than standard market investments). Alternative investments have potential to provide greater returns than public equity markets and steady returns during periods of high market volatility. The alternative asset class underperformed its benchmark for the one-, three-, and five-year periods, but outperformed benchmarks for the 10-year period and since inception.

According to Virginia529 staff, most of the underperformance in the alternatives asset class can be attributed to the private equity funds. Most of the Prepaid529 private

equity funds are still in the early stages of their life cycles (over half of private equity funds are four years old or newer). Private equity funds like those invested in by Virginia529 typically take four to five years to mature, and performance is stronger in the later years of the investment cycle after that maturation has occurred. The performance of the alternative portfolio was also hindered by the performance of the fund's largest private real estate manager, which underperformed compared to the peer group against which it is benchmarked.

Prepaid529 funded status

Virginia529 must maintain sufficient assets in the Prepaid529 fund to pay the program's current and future obligations. The fund receives three categories of revenue: Prepaid529 contract payments received, fund investment returns, and net operating revenue, mostly composed of fees from other Virginia529 programs. Assets must be sufficient to cover future benefit payments, refunds, and other payouts.

The Prepaid529 fund currently has sufficient assets to cover its estimated obligations. Prepaid529's funded status was 138 percent as of June 30, 2017 (sidebar). The current funded status is the highest in the program's 21-year history. Over the past 10 years, Prepaid529's funded status has not been lower than 85 percent (Figure 3). This low point occurred at the end of the 2007-2009 recession, when there were major declines in the domestic and international equity and credit markets that affected many of the program's investments. The fund recovered to a funded status of over 100 percent within two years.

The Prepaid529 funded status of 138 percent indicates a high likelihood of the fund being able to cover future obligations. Virginia529's plan actuary estimates that the plan has an actuarial reserve of \$787 million (sidebar). At this level, the Prepaid529 fund has a 98 percent chance of meeting or exceeding future obligations, as estimated by the plan actuary in the 2017 fund valuation using current actuarial assumptions.

Pursuant to statute, net operating revenue generated by other Virginia529 programs is allocated to the Prepaid529 fund at the end of each fiscal year, where it is invested along with other assets and contribute to the program's favorable funded status (sidebar). From FY10 to FY17, net operating revenue remaining at the end of the fiscal year, ranging from \$16 million to \$29 million per year, was allocated to the Prepaid529 fund. These allocations accounted for about eight percent, adjusted for investment returns, of the fund's assets.

Prepaid529 has the second-highest funded status nationwide among the 10 programs that are currently open to new enrollment. Only Maryland, with a 149 percent funded status, is higher.

Funded status is the actuarially determined ratio of assets to obligations for the Prepaid529 program

The Prepaid529 fund's actuarial reserve is the best estimate of the present value of the surplus (or deficit) that will result once all currently held obligations are paid, over time, using the assets currently held in the fund.

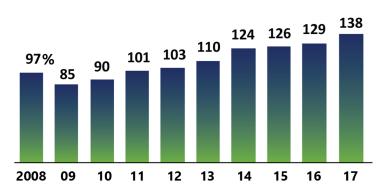
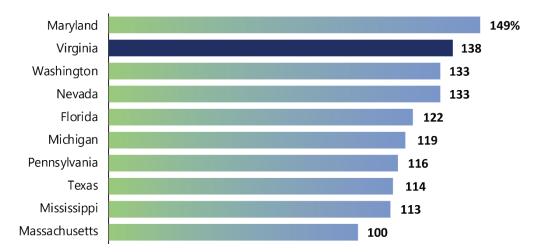


FIGURE 3 Prepaid529 percent funded status (as of June 30)





The quadrennial actuarial review of the Prepaid529 fund is required under the Virginia College Savings Plan Oversight Act (§ 30-332). The review is to be conducted with the assistance of an actuary and to be produced once every four years. The purpose of the audit is to provide the General Assembly with an overview of the soundness of the actuarial assumptions, policy, practices, and reporting that are in place for the Prepaid529 fund. Gabriel, Roeder, Smith & Company (GRS) was hired by JLARC to conduct the 2017 review.

SOURCE: Virginia529 actuarial data.

NOTE: All plans funded status as of end of FY17 in that state, FY calendar varies across states. Massachusetts program is supported by state general obligation bonds and therefore the funded status always remains at 100 percent.

Quadrennial review conducted by JLARC actuary confirmed actuarial soundness of Prepaid529

The quadrennial actuarial review (sidebar) confirmed that the assumptions used to calculate the Prepaid529 funded status are reasonable and actuarially sound. The Prepaid529 fund has sufficient assets to cover the estimated value of future obligations. The two primary actuarial assumptions are the long-term rate of investment return for assets and tuition growth. The assumed long-term rate of investment return for the fund is currently 6.25 percent. The tuition growth assumption is that tuition and fees at Virginia four year institutions will increase by 5 percent for the 2018-2019 academic year and 6.5 percent each year thereafter.

Because of fund's high funded status and actuarial soundness, board has an opportunity to better balance affordability and protection against risk

The Prepaid529 fund's relatively high funded status and actuarial soundness creates an opportunity to better balance program affordability and protection against risk. Program affordability should be a primary consideration for Virginia529. The General Assembly established the agency "to enhance the accessibility and affordability of higher education for all citizens of the Commonwealth" (§ 23.1-701). Options to improve program affordability include (1) providing rebates to existing contract holders using assets from the fund surplus, and (2) reducing the pricing reserve on contracts sold in the future. These options were identified through various sources, including the 2017 quadrennial audit of the Prepaid529 program conducted by the JLARC actuary, conversations with the Virginia529 plan actuary and an actuary for prepaid programs in other states.

Reducing the risk of the Prepaid529 investment portfolio to further protect surplus fund assets in the event of a negative market was another option offered by prepaid program actuaries and some investment professionals (sidebar). However, doing so would lower the investment return assumption of the program, which is likely to result in higher contract prices. Higher contract prices would be in direct conflict with the goal of improving program affordability. In addition, reducing the plan's investment risk was not a preferred option when compared to other investment strategies, in the opinion of the Virginia529's investment consultant in their 2016 asset liability study.

Provide rebates to existing contract holders

Rebates would benefit customers who have already purchased contracts, but there are several disadvantages associated with rebates. Rebates would be complex to administer and distribute, and any funds received in the form of a rebate may have tax implications for contract holders.

Maryland is the only program that considers rebates to current contract holders as a way to address program affordability. Maryland's state statute directs the board to consider providing rebates to customers in any year in which funded status is greater than 130 percent. Maryland's program had a funded status exceeding 130 percent since 2014, but the board has elected not to provide rebates.

Reduce the pricing reserve on future contract sales

Reducing the pricing reserve on future Prepaid529 contracts would improve program affordability while having minimal impact to funded status and actuarial soundness of the program. A 10 percent pricing reserve is currently added to the price of each contract sold (sidebar). The pricing reserve has been set at 10 percent since early in the program's history. The extent of the improvement in affordability would depend on the extent of the reduction to the pricing reserve (Table 3). For example, reducing the

Further reducing risk in the Prepaid529 investment portfolio would entail shifting the allocation of fund assets toward lower-risk investments to protect surplus fund assets during a down market.

The **pricing reserve** on a Prepaid529 contract is a portion of the contract price that is in excess of the amount estimated to be needed to pay future contract benefits.

Pricing reserves are commonly used for prepaid college tuition contracts and other financial products.

The pricing reserve generates surplus revenue to protect the fund against risk. pricing reserve from 10 percent to nine percent would reduce the current 2017-2018 contract price by \$77 for each semester purchased. Reducing the pricing reserve to nine, seven, or five percent would lower the price of an eight-semester contract (four full years of tuition and fees) by \$617, \$1,851, or \$3,085 respectively.

Type of	2017-2018	Price reduction resulting fro 2017-2018 lowering pricing reserve to			
contract	total contract cost	pricing reserve (10%)	9%	7%	5%
1 semester	\$8,485	\$771	\$77	\$231	\$386
2 semester	16,970	1,543	154	463	771
4 semester	33,940	3,085	309	926	1,543
8 semester	67,880	6,171	617	1,851	3,085

TABLE 3 Reducing pricing reserve would improve program affordability

SOURCE: JLARC analysis of Virginia529 program data.

NOTE: Pricing reserve is included as part of "total contract cost." Contract prices are for child aged kindergarten through 4th grade. Contract prices vary depending on age of child for whom contract is purchased.

The **base contract price** is set at a price equal to amount estimated to be needed to pay future contract benefits. The pricing reserve represents only a small portion of Prepaid529 fund revenue. The 10 percent pricing reserve is expected to generate an estimated \$8.3 million of the total estimated \$107.4 million in Prepaid529 revenue from contract sales and net operating revenue in FY18 * (Figure 4). Under the current FY18 assumptions, a majority of fund revenue would come from base contract prices (\$83 million) and the net operating revenue transferred to the fund at the end of the year (\$16.1 million). If FY18 assumptions hold, the pricing reserve applied to new contracts sold and Virginia529's net operating revenue would contribute an estimated \$24.4 million of additional assets to the Prepaid529 fund's existing \$787 million actuarial reserve.

Reducing the pricing reserve on future contract sales would have minor impact to the Prepaid529 fund. Each one percent reduction of the pricing reserve, using FY18 prices and estimated contract sales, would reduce total Prepaid529 fund revenue by just \$830,000.

^{*} The Prepaid529 fund also has revenue from investment returns in most years.

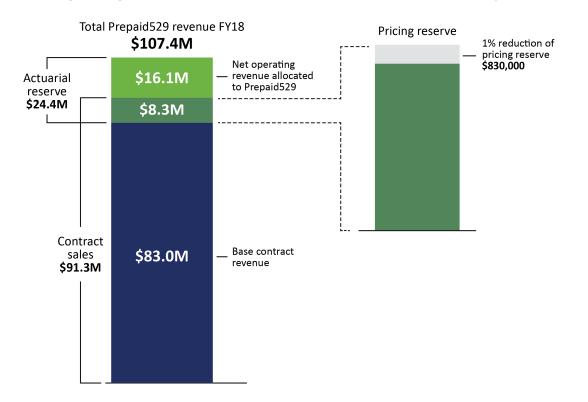


FIGURE 4 Reducing pricing reserve would have minor impact on revenue received by the Prepaid529 fund

SOURCE: JLARC analysis of Virginia529 actuarial data; Virginia529 revenue estimates; and 2017 Appropriation Act. NOTE: Assumes 3,000 contracts sold during 2017-2018 enrollment period. Net operating revenue is calculated as difference between Virginia529 FY18 operating expenses set by 2017 Appropriation Act and projected operating revenue which is largely derived from fees charged for the Invest529 and CollegeAmerica program. Does not include potential revenue from investment returns or other sources.

For example, reducing the pricing reserve from 10 percent to seven percent would measurably improve affordability of Prepaid529 contracts but would have only a minor impact to the fund (Exhibit 1). Under this scenario, using FY18 estimated contract sales, and FY18 contract prices, the price of an eight-semester contract would be reduced by over \$1,800, and the reduction in the future funded status of Prepaid529 would be approximately 0.1 percent. The program's \$787 million actuarial reserve would be expected to increase by \$21.9 million, instead of the \$24.4 million that is currently estimated, a difference of just \$2.5 million. Therefore, the fund surplus would still be expected to increase, just at a slightly slower rate. According to the Virginia529 actuary, a reduction to the pricing reserve on future contract sales would have a very minor impact to the fund, considering the fund's current size and actuarial reserve, relative to the amount of revenue generated by new contract sales each year.

Reduction of contract price for	Impact to fund
1-semester contract	~ 0.1 percent reduction to future funded status
\$231	(\$2.5 million of \$2.7 billion)
8-semester contract	Actuarial reserve estimated to continue to grow,
\$1,851	but at a slightly slower rate

EXHIBIT 1 Reducing Prepaid529 pricing reserve from 10 percent to 7 percent

SOURCE: JLARC staff analysis of Virginia529 actuarial data.

NOTE: Impact to fund is for one year of contract sales with reduced pricing reserve. Assumes FY18 contract prices and 3,000 contracts sold during 2017-2018 enrollment period. Impact to fund represents slower growth of the estimated actuarial reserve, and is *not* projected to create new unfunded obligations.

Other states with comparable program structures are using the pricing reserve to address affordability for their prepaid college tuition programs. Mississippi and Nevada have established guidelines to adjust the pricing reserve according to changes in the funded status of the prepaid fund. Under the guidelines, the pricing reserve on new contracts would be reduced when the funded status exceeds a target—115 percent in Mississippi and 120 percent in Nevada—and increased when the funded status falls below the target. (Table 4). These guidelines can serve as an illustrative example for Virginia. (Five of the 10 open prepaid programs nationwide structure contracts and develop contract prices differently than Prepaid529; therefore, prepaid contracts in those states do not have a pricing reserve to adjust.)

TABLE 4 Nevada and Mississippi have developed guidelines for their pricing reserve

Mississippi			Nevada
Funded status	Pricing reserve applied to new contracts	Change to pricing reserve Funded status applied to contracts the following	
below 110%	10%	below 110%	Increase by 6 percentage points
110–113	5%	110–118	Increase by 4 percentage points
113–115	3%	118–120	Increase by 2 percentage points
target 115%	3%	target 120%	No change
115–117	3%	120–122	Decrease by 2 percentage points
117–120	1%	122–130	Decrease by 4 percentage points
above 120%	0%	above 130%	Decrease by 6 percentage points

SOURCE: Mississippi and Nevada prepaid program guidelines.

NOTE: The Mississippi and Nevada guidelines refer to their pricing reserve as a "risk premium." In 2017, Mississippi and Nevada applied a pricing reserve of 1 percent and 6.2 percent respectively to new contracts. Mississippi guidelines are for contracts for four-year institutions and refer to contract sales for Mississippi's "Horizon Plan" opened in 2014. No Horizon plan funds are intended to be used to pay liabilities for Mississippi's "Legacy Plan."

The funded status and pricing reserve guidelines for the prepaid college tuition programs in Mississippi and Nevada were established by their boards, as a result of recommendations from and consultation with the plan actuary. GRS, which provides actuarial services for Mississippi and Nevada, explained that if the funded status for the plans continues to grow, the plans are overcharging customers and amassing assets that might never be used. Similarly, staff with the Mississippi plan explained that in the view of the staff and the board, if the funded status climbs higher, the program is in a position to consider a price reduction on future contract sales. The guidelines in each state are not mandatory, but rather, serve as a baseline to assist and facilitate board discussion when the board sets contract prices for the next year. In extenuating circumstances, such as during the high point of a market cycle, the board may deviate from the guidelines.

Virginia529 staff expressed concerns about reducing the pricing reserve on future contract sales or setting guidelines to do so. Some of these concerns could be addressed by making the guidelines flexible. Other concerns should be weighed against the overall responsibility of enhancing program affordability.

- Reducing the pricing reserve on future contracts creates equitability concerns for those who already purchased contracts Future contract buyers would pay a lower percentage towards the pricing reserve than those who purchased in the past, but this factor is likely outweighed by the benefit of improving program affordability in the future.
- The 10 percent pricing reserve has been consistently used through program history, regardless of funded status – The funded status and actuarial reserve are at an alltime high. These factors can warrant a shift from past practices in the way that the board balances affordability and protection against risk.
- Adjusting the pricing reserve on a yearly basis would increase contract price volatility Reducing or raising the pricing reserve would contribute a change of a few percentage points on contract prices from year to year, which would likely be less than the change to contract prices caused by rising tuition and fees.
- Future decreases to funded status or actuarial soundness may necessitate returning the pricing reserve to a higher percentage Guidelines to decrease the pricing reserve could also allow for an increase in the pricing reserve in the event of a decrease in the funded status. In this scenario, customers purchasing in the near term would still benefit from the lower pricing reserve.
- Reductions in the pricing reserve have only a small relative impact on contract prices Contract prices are primarily driven by the price of tuition and fees, but a reduction in the pricing reserve could produce modest, but meaningful, savings for customers.
- Reduction to the pricing reserve would likely be too small to notably increase contract sales Increased contract sales is a secondary consideration to Virginia529's primary responsibility of enhancing the affordability of college education.

• The current high funded status is influenced by favorable market conditions, but a market downturn would cause funded status to decline – The Prepaid529 fund has experienced decreases to funded status during past economic downturns but has generally recovered quickly. The fund currently has a funded status higher than previous peaks. The fund is well diversified and is strategically positioned to protect assets during a downturn.

Establishing a pricing reserve guideline would provide a transparent approach to balancing program affordability, which is a statutory goal of Prepaid529, and protection against risk to the fund. Under current practice, the Virginia529 board discusses the funded status and pricing reserve when setting contract prices each year. However, when board committees and the board discuss contract prices, they usually do not consider changes to the pricing reserve, even though adjusting the pricing reserve is the board's primary mechanism for improving affordability. The board has not adjusted the pricing reserve in nearly two decades.

The relatively high funded status of the fund provides an opportunity for the board to adopt a guideline that more systematically and formally includes affordability in the discussion of contract price and protection against risk to the fund. Efforts to establish a pricing reserve guideline should be undertaken in consultation with the Virginia529 plan actuary, because actuarial assumptions and the manner in which a pricing reserve is calculated are unique to individual prepaid programs in each state. The actuary could perform stress testing, sensitivity analysis, or other quantitative analysis to help inform the pricing reserve guideline.

In 2017, Virginia529 proposed a significant change to the overall Prepaid529 payout model. According to Virginia529 staff and the plan actuary, the new payout model would likely result in lower contract prices and would offer the potential to reduce the pricing reserve on new contracts. That new model has not yet been adopted. If the proposed changes occur, the guideline should be incorporated into the new payout model to guide future pricing reserve decisions. Regardless, the pricing reserve guide-line should be in place to be used by the Virginia529 board when setting 2019-2020 contract prices.

RECOMMENDATION 1

The Virginia529 board should establish a guideline that provides for the adjustment of the pricing reserve in relation to Prepaid529's funded status, to balance affordability and protection against risk. The guideline should be developed in consultation with the plan actuary. The guideline should be in place to be used by the Virginia529 board when setting the 2019-2020 Prepaid529 contract prices. If the Virginia529 board establishes a guideline that does not call for a reduction in the pricing reserve when the Prepaid529 fund exceeds 130 percent, then the board should provide a report, with actuarial analysis justifying this decision, to JLARC and the House Appropriations and Senate Finance Committees, by October 1, 2019.

RECOMMENDATION 2

After the Virginia529 board has adopted the pricing reserve guideline, any deviation from the guideline, when setting future contract prices, should be communicated in a letter to JLARC and the House Appropriations and Senate Finance Committees with a detailed explanation of the basis for the deviation.

Virginia529 is seeking changes to Prepaid529 payout model

Virginia529 is seeking a significant change in the Prepaid529 program payout structure. Over the past three years, Virginia529 staff, with the assistance of the Virginia529 actuary, studied the Prepaid529 program to examine the sustainability of the program. The study was meant to determine whether changes should be made to improve program sustainability and structure. The Prepaid529 sustainability study was presented to the Virginia529 board in 2016. After review, the board authorized exploration of a new Prepaid529 model that would pay the enrollment-weighted average tuition (WAT) at Virginia public universities as the basic contract benefit.

The proposed WAT model would change Prepaid529 contract payouts from the current payout model, normal full-time, undergraduate, in-state tuition and mandatory fees at Virginia's public institutions (and return-adjusted payouts to students attending out-of-state and private institutions), to a WAT payout that would be the same for all students, regardless of where they attend college (in-state, out-of-state, public, or private). The WAT payout may be more or less than the actual cost of tuition and fees, depending on where a student attends college. Students who attend more expensive institutions would have to cover the difference between the WAT payout and actual tuition and fee costs, and students who attend less expensive institutions may have funds left over, which could be used for other expenses such as room and board. Under the WAT payout model, contracts would be sold by "units" that represent a percentage of WAT, rather than by semester units. The proposed changes to the Prepaid529 program would only apply to future contracts.

Virginia529 staff and the board indicate that the WAT payout model has several advantages over the current benefit model. These include potential for reduced contract pricing and more flexible payment terms. The uniform WAT payout to all contract holders would simplify the payout structure and improve equitability by eliminating the wide dispersion of payout amounts across beneficiaries—students who attend a range of different institutions and therefore receive different payouts, even though they purchased contracts at the same rates. Furthermore, the WAT model would allow benefits to be used for a wider array of higher education expenses (books, room and board, equipment) rather than just tuition and mandatory fees.

In 2017, the Virginia529 board proposed legislation that would change the Virginia529 section of the Code of Virginia to allow the program payout model to be changed to the WAT model. The legislation did not pass during the 2018 General Assembly session (HB1199 and SB656). Concerns about the WAT model included the shift away from paying the full cost of tuition and fees at in-state institutions and that the unit

Weighted average tuition is the average tuition and fees paid by students, weighted by enrollment across Virginia's four-year public universities. structure of contract sales could create confusion among customers. There was also an expressed desire for more information about the proposal in general.

The 2018 General Assembly enrolled budget (Item 31 F.11) requires JLARC to review Virginia529's proposed WAT payout model and report on how the proposal would impact program payout, contract costs, program sustainability, and overall complexity of the program. JLARC staff will report on these items at the November JLARC meeting.*

^{*} Language as it appears in the 2018 General Assembly enrolled budget. Budget had not been signed by the governor as of time of this report.

2. Invest529 program

Invest529 is a college savings program sold directly by Virginia529 to program participants. Participants contribute to their individual accounts and determine how funds are invested by selecting from a menu of options. Investment earnings are exempt from federal taxes as long as they are used to pay for qualified education expenses, such as tuition, books, and housing. For state residents, Virginia also exempts earnings from state taxes and offers an income tax deduction for contributions made to this and other Virginia529 savings programs. Funds from Invest529 accounts can be used at institutions in Virginia and other states. The program distributed \$260 million to participants in FY17.

Invest529 participation

Participation in the Invest529 program has increased over the past 10 years (Figure 5). Two measures of program participation are the number of participant accounts and the total assets under management. The number of Invest529 accounts more than doubled in the 10 years from 2009 to 2018, increasing by an average of 11 percent per year. The value of assets under management grew from \$1.1 billion to \$4.4 billion. This growth is attributable to both new contributions and investment returns. The increase in Invest529 participation follows a national trend for college savings programs, which have steadily grown over the past decade.

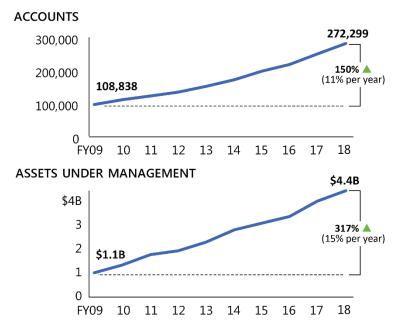


FIGURE 5 Invest529 account and asset growth

SOURCE: Virginia529 program data.

NOTE: Figures reported are as of the June 30 end of the fiscal year except for 2018, which is as of March 31.

Invest529 investment performance

The Invest529 program held an aggregate of \$4.4 billion in assets as of March 31, 2018. Assets are owned by program participants, who have their own individual accounts. Individual participants determine how to invest by choosing from options offered by the program.

Program participants may choose any combination of 20 different investment options. (Two additional investment options are closed to new participants.) Investment options include traditional individual investment options, such as stock and bond investments, and target-date portfolios that automatically adjust over time. Thirteen options are actively managed, with the goal of providing better returns or lower volatility than the overall market. The remaining nine options are passively managed and track market indices.

The Invest529 investment options generally outperformed long-term benchmarks and had more mixed performance in the near term (Table 5). All of the actively managed investment options met or outperformed their 10-year benchmark. A majority of actively managed investment options outperformed their three- and five-year benchmarks. However, only four of 13 outperformed their one-year benchmarks, with five options underperforming by 25 or more basis points. The underperforming options tended to be those with a higher proportion of international equity and real estate investments—two areas where the program's underlying managers have underperformed during this time period. Most of the passively managed options met or outperformed their benchmarks for all periods (adjusted for fees).

TABLE 5

Invest529 program investment performance

for the period ending March 31, 2018

	1 year	3 years	5 years	10 years
Actively managed options				
Met or exceeded benchmark	4	5	5	6
Total number of options	13	9	8	6
Passively managed options				
Met or exceeded adjusted benchmark	7	6	7	6
Total number of options	9	8	8	8

SOURCE: Virginia529 program data.

NOTE: The total number of investment options in each period can differ because longer-term performance data is not available for newer options. Performance is reported net of investment fees. Passively managed options are expected to provide returns equal to their benchmark index, less any fees charged to participants. Benchmarks were adjusted to account for the estimated impact of fees. Some passively managed options continued to trail the benchmark after this adjustment was made. Invest529 offers two new options that were approved by the Virginia529 board and became available on January 1, 2017. The options added were the FDIC-insured portfolio (discussed below) and the 2036 age-based portfolio. The 2036 portfolio is a target-date portfolio that adjusts over time as the participant approaches college age. A new target-date portfolio is added every three years as an existing target-date portfolio reaches its end point and closes.

FDIC-insured portfolio replaces CollegeWealth program

In 2016, Virginia529 created an FDIC-insured portfolio within the Invest529 program. The FDIC-insured portfolio option acts in the same manner as an interest-bearing bank savings account to appeal to risk-averse customers.

The creation of the FDIC-insured portfolio was in response to the decision of the Virginia529 board to discontinue the CollegeWealth program. CollegeWealth had previously been a standalone FDIC-insured education savings program offered through Virginia529's partnership with two financial institutions, BB&T and Union Bank & Trust. According to Virginia529 staff, CollegeWealth's status as a standalone program hampered its growth, as consumers were often not able to find it among the suite of options offered by Virginia529. The program's structure presented operational challenges for both Virginia529 and the participating banks. CollegeWealth was also relatively small compared to Virginia529's other education savings programs.

Virginia529 ceased sales of new CollegeWealth accounts in 2017 and sought to move CollegeWealth accounts into the new Invest529 FDIC-insured portfolio. All CollegeWealth accounts held at Union Bank (3,350 accounts) have been transitioned to the new Invest529 FDIC-insured portfolio. BB&T Bank decided to retain its existing CollegeWealth accounts, although new accounts could not be opened after April 2017. While some customers with CollegeWealth accounts at BB&T Bank have actively chosen to move their accounts to the Invest529 FDIC-insured portfolio, as of March 31, 2018, 12,590 accounts with \$51.4 million in assets remain in BB&T Bank accounts. The Invest529 FDIC-insured portfolio had 6,953 accounts and \$70 million in assets as of the same date.

The FDIC-insured portfolio currently invests in an omnibus savings account with an interest rate (APY) of 1.275 percent, which is slightly above the average rate offered by comparable products by 529 programs in other states. In comparison, the interest rate for the CollegeWealth accounts that remain with BB&T Bank is currently .05 percent, which is lower than the rate offered by nearly all comparable products nation-wide.

Federal Deposit Insurance Corporation (FDIC) is an independent federal agency insuring deposits in U.S. banks and thrifts in the event of bank failures

Invest529 age-based portfolio review

A glide path describes the gradual change of asset mix over time for a target date fund. Target date funds tend to have a higher percentage of equities when the target date is in the distant future, which changes to an asset mix that emphasizes capital preservation as the target date approaches.

Morningstar, an independent investment research firm, rates college savings plans using five criteria—process, performance, people, parent, and price. In 2017, Virginia529 worked with Mercer, its investment consultant, and contracted with Callan, also an investment consultant, to conduct a review of the Invest529 agebased (target-date) portfolios. Callan's analysis compared the Invest529 age-based portfolios to peer 529 plan age-based portfolios in other states. Callan compared portfolios using criteria such as plan features, asset allocation, investment and administrative fees, and risk and return. Mercer examined Invest529's age-based portfolio glide paths (sidebar) and reviewed and modeled alternative glide paths for consideration. The last time a review of this nature was conducted for Invest529 age-based portfolios was 2009.

Callan and Mercer found that the age-based portfolios are generally comparable to those in other states and are well diversified and efficient. One change resulting from the review was a shift in the type investments that make up the real estate component of the age-based portfolios. The investment advisory committee, under delegated authority from the board, elected to shift the underlying real estate investment for the age-based portfolios from a global REIT mandate to a private real estate mandate. The private real estate mandate was shown to offer potential for greater return while maintaining similar risk and cost.

Invest529 receives gold rating from Morningstar

The Invest529 program was upgraded from a silver to a gold Morningstar rating in October 2016 and retained the gold—Morningstar's highest rating—in 2017. Morningstar cited the program's strong managers, recent fee reductions, and an asset allocation of the age-based portfolios that includes a mix of passive and active strategies. Only four of the over 60 college savings programs evaluated by Morningstar received a gold rating in 2017.

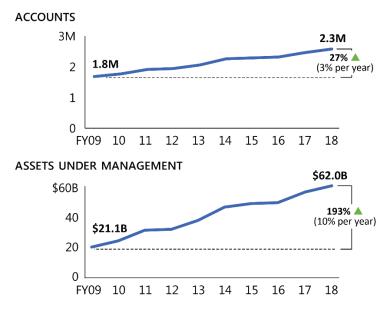
3. CollegeAmerica program

CollegeAmerica is an education savings program offered under a partnership between Virginia529 and Capital Group, a private mutual fund company. CollegeAmerica accounts are sold through private financial advisors and invested in a suite of American Funds mutual funds. Program participants contribute to individual accounts and work with their advisor to determine how money is invested. Investment earnings are exempt from federal taxes as long as they are used to pay for qualified education expenses, such as tuition, books, and housing. For state residents, Virginia also exempts earnings from state taxes and offers an income tax deduction for contributions made to this and other Virginia529 college savings programs. Funds from CollegeAmerica accounts can be used at institutions in Virginia and other states. The program distributed \$3.5 billion to participants in FY17.

CollegeAmerica participation

Participation in the CollegeAmerica program has increased over the past 10 years (Figure 6). Two measures of program participation are the number of participant accounts and the total assets under management. The number of CollegeAmerica accounts increased by an average of three percent per year from 2009 to 2018. The value of assets under management nearly tripled, from \$21.1 billion to \$62 billion. This growth is attributable to both new contributions and investment returns. The increase in CollegeAmerica participation follows a nationwide trend for college savings programs, which have grown steadily over the past decade.

FIGURE 6 CollegeAmerica account and asset growth



SOURCE: Virginia529 program data.

NOTE: Figures are reported as of the June 30 end of the fiscal year except for 2018, which is reported as of March 31.

CollegeAmerica investment performance

The CollegeAmerica program held an aggregate of \$62 billion in assets as of March 31, 2018. Assets are owned by program participants, who have their own individual accounts. Individual participants, in consultation with their advisor, determine how their money is invested.

Program participants may choose from 44 different investment options offered under Capital Group's American Funds mutual funds. Investment options include traditional individual investment options, such as stock and bond investments, target-date portfolios that automatically adjust over time as the beneficiary approaches college age, and diversified portfolios ("Portfolio Series") based on different investment strategies such as growth or capital preservation. All of the CollegeAmerica options are actively managed, with the goal of providing better returns or lower risk than the overall market.

The CollegeAmerica investment options had mixed performance relative to benchmarks as of March 31, 2018 (Table 6). Less than half of individual options outperformed their benchmarks for the previous year, and a majority of the individual options outperformed their three-, five-, and 10-year benchmarks. Most College Target-Date options underperformed their benchmarks for all periods reported. Half of the Portfolio Series options outperformed their benchmark in each period.

	1 year	3 years	5 years	10 years
Individual options				
Met or exceeded benchmark	13	17	17	14
Total number of options	30	28	27	21
College Target-Date options				
Met or exceeded benchmark	2	2	1	n/a
Total number of options	7	7	6	
Portfolio Series options				
Met or exceeded benchmark Total number of options	3	<u>3</u> 6	<u>3</u> 6	n/a

TABLE 6CollegeAmerica program investment performance

for the period ending March 31, 2018

SOURCE: Virginia529 program data.

NOTE: The total number of investment options can change because longer-term performance data is not available for newer options. One-year data is not yet available for one recently established College Target-Date option. All College Target-Date and Portfolio Series options have inception dates of 2012 or later and therefore do not have 10-year performance to report. Performance is reported net of investment fees. Investment performance comparisons are for the "A" share class; 78 percent of CollegeAmerica assets are invested in A shares. Individual options and Portfolio Series options are benchmarked against the Lipper Funds Index except where unavailable. College Target-Date options are benchmarked against the Lipper Funds Average.

CollegeAmerica offers three new investment options that were approved by the Virginia529 board over the past two years. These include the Corporate Bond Fund, the Emerging Market Bond Fund, and the American Funds College 2036 Fund. The American Funds College 2036 Fund, which became available in 2018, is a target-date portfolio that adjusts over time as the participant approaches college age. A new targetdate portfolio is added every three years as an existing target-date portfolio reaches its end date and closes

4. ABLE programs

The new Achieving a Better Life Experience (ABLE) program is intended to offer taxadvantaged 529A savings accounts for individuals with disabilities. Account funds can be used to pay for qualified disability expenses such as education, training, medical care, housing, and transportation. State-run ABLE programs were authorized under a 2014 federal law, and Virginia became the first state to enact ABLE legislation in March 2015.

Under Virginia's ABLE act, Virginia529 was vested with responsibility for establishing and managing programs for ABLE savings accounts. Virginia529's two ABLE programs will be modeled on its two education savings programs. Both Virginia529 ABLE programs will be national programs, open to enrollment by residents of Virginia and other states. Virginia529's ABLEnow direct-sold program opened in 2016, and the ABLEAmerica advisor-sold program is scheduled to open in 2018.

ABLEnow direct-sold program

The ABLEnow program is a "direct-sold" investment program similar to Invest529. Under this program, participants establish investment accounts directly with Virginia529. Virginia529 is responsible for customer service, investment oversight, and marketing. As with Invest529, Virginia529 offers ABLEnow participants a suite of investment options, through external investment management firms. Virginia529 has retained PNC Financial Services to be the program's administrator. The company handles all aspects of account management, including program enrollment, contributions, and disbursements.

ABLEnow participation and investment performance

The ABLEnow program is relatively small in size compared to Virginia529's education savings programs, for two main reasons: (1) ABLEnow is relatively new and (2) the potential customer base is diverse (in terms of age and other factors) and more difficult to reach than the customer base for education savings. Furthermore, ABLE programs have requirements set by federal statute—such as annual contribution limits, that the beneficiary must also be the account holder, and a Medicaid payback provision—that may make the programs less appealing, according to Virginia529 staff. The ABLEnow program had 2,615 accounts and \$8.4 million in assets as of March 31, 2018.

ABLEnow offers four investment portfolios that vary in terms asset allocation and investment return potential. They include the aggressive growth, moderate growth, and conservative income portfolios, which are composed of different proportions of equity (stocks) and fixed income (bond) investments. All three of these options are passively managed and track market indices. The fourth option is a money market portfolio that invests entirely in cash and cash equivalents. The number of investment options available for ABLEnow is intentionally small and features inexpensive, passively managed funds to reduce costs and simplify the investment option choices because the program is relatively new. The investment advisory committee and board will consider additional options as the program grows. All four ABLEnow investment portfolios met or outperformed their benchmarks (adjusted for fees) for the one-year period as of March 31, 2018 and since program inception in December 2016 (Table 7).

TABLE 7 ABLEnow program investment performance

for the period ending March 31, 2018

	1 year	3 years	5 years	10 years	Since inception
Portfolio options					
Met or exceeded adjusted benchmark Total number of options	4	n/a	n/a	n/a	4 4

SOURCE: Virginia529 program data.

NOTE: Inception of all investment options was December 2016. Passively managed options are expected to provide returns equal to their benchmark index, less any fees charged to participants. Benchmarks were adjusted to account for the estimated impact of fees.

ABLEAmerica advisor-sold program

The ABLEAmerica program will be an "advisor-sold" investment program similar to the CollegeAmerica education savings program. Under this program, participants will establish investment accounts through private financial advisors. Virginia529 has partnered with Capital Group, its CollegeAmerica partner, to manage the program. Capital Group will handle most administration and investment management duties. Virginia529 will retain the authority to approve investment options and other aspects of the program's operations. Virginia529 expects the program to be operational in calendar year 2018.

5. Agency and program management

Virginia529 agency and program operations are entirely funded through fees charged under its college savings programs. The Virginia529 board approves the agency's budget and all changes to programs, including the fees charged to participants.

Operating expenses

Virginia529's operating expenses increased by \$6.6 million over the five-year period from FY13 to FY17 (Table 8). This represents a 37 percent increase, with an average annual increase of 8.4 percent. Controlling for the addition of the ABLEnow program, which was the source of \$1.3 million in spending beginning in FY17, Virginia529's total spending growth was \$5.3 million (30 percent) over the five-year period.

	FY13 (\$M)	FY17 (\$M)	Change (\$M)	Change (%)
Personal service	8.0	10.9	3.0	38%
Marketing & communications	3.0	5.9	2.8	93
Professional services	1.6	2.9	1.3	81
Information technology	1.3	1.5	0.3	22
Facilities and leases	1.0	1.2	0.2	19
Other ^a	1.0	1.2	0.2	18
SOAR Virginia ^b	2.0	1.0	-1.0	-50
Total	17.9	24.5	6.6	37

TABLE 8 Trends in Virginia529 operating expenses

SOURCE: Virginia529 program data: budget vs. actual reports.

NOTE: Numbers may not sum due to rounding.

^a Other expenses include Administrative Services; Meetings, Conferences, and Training; Supplies and Materials; and Professional Development, Memberships, and Subscriptions. ^b No funds were appropriated for SOAR Virginia in FY15 or FY16.

Marketing, personnel, and professional services expenses increase

Spending growth was primarily driven by increases in Virginia529's three largest spending categories: personal services (staff), marketing and communications, and professional services (consulting, outside fiscal services, etc.).

Virginia529's personal services costs increased by \$3.0 million over the past five years. The increase was in part due to the addition of 12 new staff positions, the majority of which were in the area of information technology. The other additional positions are in the areas of administration, compliance, financial operations, and the newly created ABLEnow program. Costs from the staff positions were partially offset by staff positions that were eliminated or consolidated, such as in the finance office. As of the end of FY17, Virginia529 had 94 full-time-equivalent positions, well below the maximum of 115 full-time-equivalent positions that is set in the state budget. According to

Virginia529 staff, growth in spending was also driven by the growth in employee compensation, including performance-based raises and merit-based bonuses, as part of the agency's compensation plan.

Virginia529 marketing and communication spending increased from \$3.0 million to \$5.9 million from FY13 to FY17. The \$2.9 million increase represents growth of 93 percent, averaging 18 percent annually. The increase was largely driven by Virginia529's effort to expand broadcast advertising in Northern Virginia (an expensive media market) and to increase broadcast advertising in the rest of the state to a nearly year-round cycle from August to May. There were also increases to internet advertising during this period. Increases in spending were partly offset by a reduction in spending on print advertisement, sponsorship arrangements, events, and promotions, which had been re-examined and determined to provide less impact per dollar spent.

Virginia529's professional services spending increased by \$1.3 million over the fiveyear period. Most of the growth in spending is for external services: such as to the agency's custodian (BNY Mellon Asset Services) and for recordkeeping and consulting. Fees to the custodian are largely based on the number of accounts and number of transactions made, which correspond to increases in program growth. Some spending growth was also attributed to the new use of a cyber-security consultant during this time period.

The SOAR Virginia program appropriation decreased during the FY13 to FY17 time period. SOAR Virginia is an advising and scholarship program for high school students (sidebar). The Virginia529 board established SOAR as a pilot program in 2010 and made it permanent in 2015. SOAR Virginia was appropriated \$2 million of funding in both FY13 and FY14 but did not request additional appropriation in FY15 and FY16 because sufficient funds had already been committed to fund the pilot phase of the program. SOAR Virginia did not receive its requested appropriation in FY17, but the Virginia529 board funded the program with \$1 million reallocated from elsewhere in the agency's operating budget. The program is funded from the Virginia529 enterprise fund and receives no general funds. Virginia529's board has approved increases to SOAR Virginia spending in future years, pending a budget appropriation.

Reduction in overall program revenue resulted from reduction in fees

Virginia529 reduced administrative fees on education savings programs to offer lowercost programs in response to ongoing fee reduction in both the mutual fund and the 529 industries. Effective July 1, 2016, Invest529's administrative fee on assets under management was reduced from .15 percent to .10 percent. The effective rate for CollegeAmerica, based on assets under management at the time, was reduced from .88 percent to .70 percent. The fee reductions improve program affordability for customers and were well received by investment research groups such as Morningstar.

Invest529 and CollegeAmerica fee revenue are the primary sources of operating revenue for Virginia529. Total revenue from fees decreased by about \$6.7 million between

SOAR Virginia is a scholarship program for high school students from low- and moderate-income households. Through SOAR, Virginia529 partners with non-profit organizations to provide individual advising to students, such as assistance with the college admissions process and with financial aid applications, and grants a scholarship contribution of up to \$2,000 to a Virginia529 account. SOAR is an early commitment program, in that recipients enter the program in 10th grade and must adhere to program criteria in order to be granted their scholarship.

FY16 and FY17 (\$48.7 million to \$41 million) as a result of fee reductions. Despite the decrease in fee revenue, Virginia529's \$41 million in operating revenue was greater than Virginia529's \$25.3 million operating expenses in FY17. As required by statute, the net operating revenue of approximately \$16.5 million were allocated to the Prepaid529 fund.

ABLEnow expenses exceed program revenue

The creation and implementation of the ABLEnow program increased staff and budget resource commitments for Virginia529. Costs attributable to ABLEnow were \$1.3 million in FY17. New expenses, some of which are implementation costs, include costs of

- contracting with a program administrator (PNC Bank),
- developing program materials and documentation,
- designing program investment options,
- establishing tax and other reporting requirements,
- creating a separate ABLEnow website,
- enhancing IT processes and systems,
- program marketing (digital marketing, events, developing partnerships with stakeholder groups), and
- staff training.

ABLEnow program expenses will be greater than program revenue for the foreseeable future. The program is new, so it has relatively few customers and just \$8.4 million in assets—a relatively small basis upon which to collect fees.

The ABLEnow program will have to increase in scale to provide sufficient revenue to pay for ongoing costs for Virginia529. Virginia529 requested an appropriation for ABLEnow marketing and outreach of \$1.5 million for each year of the FY19 and FY20 biennium. This request represented a \$1.25 million increase over the \$250,000 appropriation for the previous biennium. However, the additional appropriation was not approved by the General Assembly, and ABLEnow marketing and outreach was appropriated \$250,000 for the new biennium. Virginia529 staff indicate a concern that the absence of additional funds for ABLEnow marketing will make it more difficult to spread awareness and increase the scale of the program. As a short term measure to address this concern, the board approved a reallocation of \$580,000 of FY18 ABLEnow appropriations to marketing and outreach in order to pay for additional advertising in 2018.

Virginia529 will eventually receive fee revenue from the ABLEAmerica program through their partnership with Capital Group, which could potentially cover costs for both ABLEAmerica and ABLEnow. Capital Group will pay revenue to Virginia529 in return for program sponsorship of ABLEAmerica (similar to the arrangement for CollegeAmerica), but under the contract, these payments will not begin until the ABLEAmerica program has achieved \$300 million in assets under management or five years after the opening of the program, whichever occurs first. ABLEAmerica will be marketed and sold at a national level and can be expected to build a large customer base, but it is unclear how long it will take for ABLEAmerica to reach \$300 million in assets under management.

Actions taken in response to 2017 JLARC report on Prepaid529 investment management

JLARC staff were asked to review the investment management structure of Virginia529's Prepaid529 fund and to assess whether there are options to more efficiently manage the fund, including but not limited to, assigning management of the fund to the Virginia Retirement System or the Department of Treasury. The JLARC report, released to the commission in July 2017, found that responsibility to manage Prepaid529 investments should *not* be transferred to the Virginia Retirement System or the Department of Treasury, but several recommendations for further strengthening the Prepaid529 investment management structure were offered. The report recommendations and Virginia529's responses are below.

The Virginia529 board should establish an investment director position that would have investment management responsibility at Virginia529, including the Prepaid529 fund. The report found that such a position would promote accountability for fund management and performance, that the size and complexity of the fund justified such a position, and that the position would further enhance the program's investment management structure. The report also recommended that the General Assembly consider establishing the investment director position in statute.

Response: Virginia529 created and filled the investment director position. The investment director will assume many of the day-to-day responsibilities and broader strategic aspects related to management of the Prepaid529 fund and Virginia529's other savings programs. The individual hired to the position has 26 years of investment-related experience in credit markets, serving both public and private entities. A majority of the investment and reporting staff from the investment division will report to the investment director. The investment director will report directly to the Virginia529 board while working closely with the chief executive officer and the chief financial officer.

• The chief financial officer should be removed as an ex officio voting member of the investment advisory committee to promote independence and objectivity in managing the Prepaid529 fund.

Response: The Virginia529 board adopted the recommendation soon after release of the report.

• The report recommended Virginia529 staff, with the assistance of the investment consultant, conduct performance attribution analysis for the Prepaid529 fund and report results to the board on a routine schedule. Performance attribution analysis is the practice of examining components of a portfolio to identify the impact of the manager and asset allocation decisions in relation to overall investment policy.

Response: The board adopted the recommendation soon after release of the report.

• The Virginia529 board should contract with a third party to conduct an independent review of Prepaid529 benchmarks to determine whether they are the appropriate indicators against which to measure performance of the Prepaid529 fund, given the investment strategy currently used by Virginia529 board and investment advisory committee. Findings of the review were to be reported to JLARC.

Response: Virginia529 staff and its investment consultant conducted an internal review of investment benchmarks and revised benchmarks at the manager, asset class, and total fund level. The revised benchmarks were recommended by the IAC and approved by the Virginia529 board. While Virginia529's internal benchmark review and revision was an important and useful exercise for this process, a third-party benchmark review would provide the benefit of an objective outside perspective, and can help to ensure that fund benchmarks facilitate accountability and transparency for plan participants and other stakeholders.

Language in the 2018 General Assembly enrolled budget directs JLARC to contract with a third-party consultant to conduct an independent review of benchmarks used for the Prepaid529 fund and to make recommendations for changes to existing benchmarks, as warranted. JLARC staff will present the findings of the benchmark review in December 2018.

Recent legislation

The General Assembly makes changes to Virginia529 programs through legislation and approves Virginia529 spending, including appropriations for administrative spending and payments made under the Prepaid529 program. The 2018 General Assembly enrolled budget includes several budget amendments that affect Virginia529 and its programs (Table 9). In addition, federal tax reform legislation expanded the use of funds in education savings programs and changed some of the ABLE program rules.

TABLE 9 General Assembly enrolled budget

2018 session	
Appropriation Act Item 31 F.11	Review of Prepaid529 proposed weighted average tuition payout Directs JLARC to review Virginia529's proposed weighted average tuition (WAT) payout model for the Prepaid529 program and to report how the WAT model would change Prepaid529 relative to the existing model. JLARC staff are directed to submit a final report to JLARC, the Chairman of the House Appropriations, and Senate Finance Committee by November 30, 2018
Appropriation Act Item 31 F.12	Prepaid529 fund benchmark review JLARC is directed to contract with a third-party consultant to conduct an independent review of investment performance benchmarks used for the Prepaid529 fund. The consultant should determine whether Virginia529 is using appropriate benchmarks to measure performance, given the investment goals, strategies, and risk tolerance that the Virginia529 Board and investment advisory committee have adopted for the fund, and report findings to JLARC by December 15, 2018.
Appropriation Act Item 485 E	Virginia529 investment director Requires the newly created investment director position at Virginia529 to report directly to the Virginia529 board in order to ensure appropriate independence in the management of Virginia529 investments.
Appropriation Act Item 485 D1-D3	SOAR Virginia scholarships Appropriates \$2,000,000 of non-general funds in both FY19 and FY20 for the SOAR Virginia Scholarship program. Of the appropriation provided, the first \$1,000,000 each year is authorized under this existing appropriation. The second \$1,000,000 each year is contingent on certain criteria being met.

SOURCE: Virginia Legislative Information System.

NOTE: All items included in the General Assembly enrolled budget.

The U.S. Congress expanded the allowable use of 529 education savings plans to include tuition at elementary and secondary public, private, and religious schools as part of tax reform in 2017. Under the new law, up to \$10,000 of 529 plan assets can be withdrawn for this purpose annually, for each of the named beneficiaries of a 529 plan account. While 529 plan assets can pay for a variety of qualified education expenses for higher education such as room and board or books, tuition is the only "qualified expense" permitted at the K-12 level. Individuals using a 529 account for K-12 tuition receive the same state and federal tax benefits on contributions and investment earnings as those using the plans for higher education expenses.

Through the first quarter of 2018, Virginia529 indicates that approximately \$1.8 million has been dispersed from Invest529 savings accounts for K-12 tuition, with a majority going to private and religious schools. This figure may undercount the actual funds being used for K-12 tuition because some customers reimburse themselves from their accounts first, then make payments for qualified education expenses. Virginia529 does not have insight into what type of education expenses the personally reimbursed funds are used for.

In addition, the U.S. Congress's 2017 tax reform made minor changes to ABLE program rules. These changes allow participants to roll over funds from a 529 education account to an ABLE account and to exceed the yearly contributions cap under certain circumstances.

Renewal of investment consultant contract

Virginia529 contracts with an investment consultant to provide additional expertise and resources to the board, investment advisory committee, and Virginia529 staff. Virginia529 issued an RFP for investment consultant services in 2016 as its contract with Mercer was set to expire in 2017.

Proposals received from consulting firms were evaluated on the following criteria: firm organization and staff, conflicts of interest and ethics, asset allocation and portfolio structure, investment manager search process used by the firm, and fee. Virginia529 received proposals from four firms, two of which were brought to the investment advisory committee for in-person interviews. Following proposal evaluations and the interview process, the investment advisory committee recommended reengaging with Mercer to continue to serve as investment consultant. The board approved the action and signed a five-year contract with Mercer.

Virginia529 rebranding effort

Virginia529 launched a rebranding and website redesign effort, starting in 2016, to improve customer experience and to update the brand with a new design. The rebranding included changing the name of the prepaid college savings program from prePAID to Prepaid529 and changing the name of the educational savings program from in-VEST to Invest529.

Board appointments

William E. Eastburn was appointed by the Virginia House of Delegates to the Virginia529 board in July 2017. His term will expire in in June 2021. Eastburn is a certified financial planner at Langley Federal Credit Union. Eastburn has also served as a trustee for the Newport News Employee Retirement Fund for more than four years.

Martha M. Mugler was appointed by the governor to the Virginia529 board in June 2017. Her term will expire in 2021. Mugler is an executive assistant for business development at Old Point National Bank and is currently serving her third term on the Hampton City School Board.

Walter A. Stosch was appointed by the Virginia Senate to the Virginia529 board in April 2017. His term will expire in 2021. Stosch served in the Virginia House of Delegates for nine years, followed by 24 years in the Virginia Senate, before retiring. He is also a certified public accountant.

Peter M. Vogt was re-appointed by the Speaker of the Virginia House of Delegates to the Virginia529 board in March 2017. His term will expire in 2021. Vogt is the owner of PMV Acquisition Consulting, which provides professional services in federal acquisition, program management, and system engineering-related activities.

Edward H. Bersoff and Reginald D. Samuel were elected by the board to serve as chairman and vice-chairman, respectively, for 2018. The chairman and vice-chairman serve one-year terms.

The Virginia529 board is a supervisory board that is directly vested with authority for managing and overseeing most aspects of Virginia529. The board has 11 members, including four appointed by the governor, three appointed by the General Assembly, and four ex officio members representing the State Council of Higher Education for Virginia, Virginia Community College System, state treasurer and state comptroller. Board members serve four-year terms. The board appoints a chief executive officer who oversees the day-to-day management of Virginia529 and its programs.



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

June 5, 2018

Mr. Hal Greer Director Joint Legislative Audit and Review Commission 919 East Main Street, Suite 2101 SunTrust Building Richmond, Virginia 23219

Re: 2018 Virginia529 Biennial Oversight Report

Dear Mr. Greer:

Thank you for the opportunity to review and comment on the exposure draft of the 2018 Virginia529 Biennial Oversight Report (the Report).

The Virginia College Savings Plan (Virginia529 or the Plan) is an independent agency of the Commonwealth of Virginia, and operates pursuant to its statutory authority under Title 23.1, Subtitle II, Chapter 7 of the Code of Virginia (Va. Code §§ 23.1-700 et seq.). Virginia529 has two primary missions, one related to making higher education more affordable and accessible which we do through our three tax advantaged college savings programs, Prepaid529 (Prepaid529), Invest529 (Invest529), and CollegeAmerica, and through our early commitment scholarship program, SOAR Virginia, and the second related to improving and enhancing the lives of persons with disabilities through our tax advantaged disability savings program, ABLEnow, which allows individuals with disabilities to save for qualified disability expenses without losing certain federal and state means-tested benefits. A companion disability savings program, the advisor-sold ABLEAmerica, will open later in 2018.

We generally agree that the Report accurately describes Virginia529's responsibilities, its programs and their status. In addition, the Report contains a recommendation first raised by JLARC in its 2017 Quadrennial Actuarial Audit of the Prepaid529 Program Report and in subsequent JLARC meetings, to establish pricing reserve guidelines for Prepaid529 that would adjust the pricing reserve on new contracts given certain levels of actuarially determined funded status, either positive or negative and exclusive of the pricing suggested by following the pricing model we have used for many years. Previously, we have expressed our reservations about this recommendation and those concerns are outlined in the Report. Knowing this Report and opportunity to address the Commission was approaching, the issue was discussed at a recent meeting of our Audit and Actuarial Committee. After a lengthy discussion, the Committee reiterated its conservative inclinations with respect to the

Hal Greer Director Joint Legislative Audit and Review Commission June 4, 2018 Page 2

administration of Prepaid529 but remained open to hearing further from JLARC staff once the Report is public and the Commission is briefed. We have extended an invitation to JLARC staff to present the final Report to the Committee later this summer.

In addition, the Report mentions three amendments proposed by the House that are included in the Enrolled Budget Bill.

Item #1h refers to the Investment Director position that was created in late 2017 and, after a national search, an Investment Director was hired and started at Virginia529 in early March 2018. The Investment Director manages the investment division and reports to the Chief Executive Officer, all as recommended in the 2017 JLARC Investment Study. Item 31 #2h refers to an independent review of Prepaid529's investment performance benchmarks, also recommended in the Investment Study. Virginia529 is cooperating with JLARC in conducting the review. As explained previously, an internal review was commenced in FY18 prior to the Investment Study and was recently completed, with revised benchmarks adopted by the Investment Advisory Committee and the Board in March 2018. It is those revised benchmarks which will be reviewed. Finally, Item 31 #1h requests a review by JLARC of benefit changes to our prepaid tuition program proposed during the last General Assembly session by Virginia529 after two years of study by the Virginia529 Board in conjunction with staff and our actuary and investment consultant. The proposal, among other items, was contained in House Bill 1199 and Senate Bill 656 during the 2018 Session. SB 656 passed the Senate with a unanimous vote; however, HB 1199 was continued to 2019 with the Higher Education subcommittee of the House Appropriations Committee indicating a need for more time for review. Virginia529 looks forward to the review, due in November 2018, as well as working with the General Assembly to pass this important legislation during the 2019 Session.

We again express our appreciation to the actuaries at GRS and the JLARC staff for the professional, courteous and cooperative manner in which they conducted their work during the course of the audit and various studies. We look forward to presenting to you on June 11, 2018 and answering any questions you may have.

Sincerely,

Mary G. Morris

c:

Members, Virginia529 Board Kimberly Sarte, JLARC Joe McMahon, JLARC





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