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Report to the Governor and the General Assembly of Virginia

Defined Benefit 529 Surplus Funds

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COMMISSION DRAFT

JLARC
JOINT LEGISLATIVE AUDIT
AND REVIEW COMMISSION

JLARC Report 567

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Contents

Summary: Defined Benefit 529 Surplus Funds

WHAT WE FOUND

The findings for this report are based on the June 2021 actuarial valuation of the Defined Benefit 529 (DB529) fund, which showed a funded status of 194 percent and an actuarial surplus of $1.6 billion. This was the most recent actuarial information available at the time that JLARC staff conducted this study. As of June 2022, the DB529's funded status had declined to 188 percent, and the actuarial surplus had declined to approximately $1.4 billion because of recent market declines. The actuarial valuation and funded status vary annually but have steadily increased over the longer term, and recent changes do not affect the overall findings, recommendations, or options in this report.

WHY WE DID THIS STUDY

The Virginia College Savings Plan Oversight Act (§§30-330 through 30-335 of the Code of Virginia) requires JLARC to conduct ongoing oversight of Virginia529 and its programs. As part of this ongoing oversight, JLARC members approved a motion in July 2021 for JLARC staff to review the extent to which actuarial surplus funds from the Legacy Prepaid529 program can be used to support higher education access and affordability in Virginia. In addition, the 2022 Appropriation Act (Item 497.D of Chapter 2, 2022 Act of Assembly, Special Session I) directed JLARC to review evidence of the effectiveness of Virginia529's SOAR Virginia program and other access and affordability programs supported by Virginia529. To conduct this study, JLARC staff worked with an independent actuary, an independent investment consultant, and an independent legal consultant.

ABOUT THE DEFINED BENEFIT 529 FUND

Virginia529 operates two defined benefit college savings programs—Legacy Pepaid529, which was closed to new participants in 2019, and the new Tuition Track Portfolio (TTP), which opened in 2021. Defined benefit college savings programs provide a guaranteed payout to participants for future college tuition and fees. For actuarial and investment purposes, Virginia529 combines its two defined benefit programs into a single Defined Benefit 529 fund.

Funded status of the DB529 fund is higher than needed to cover future obligatons

According to JLARC's independent actuary, the funded status of the DB529 fund is much higher than needed to cover the future obligations of Virginia529's two defined benefit plans—the Legacy Prepaid529 program and the new Tuition Track Portfolio (TTP). The actuary advised that a lower funded status in the range of 125 percent is reasonable for a defined benefit college savings program. At a funded status of 125 percent, there is a 90 percent probability of having sufficient assets to meet Virginia529's defined benefit obligations. Other states have taken action at around 125 percent to 135 percent to either reduce (or consider reducing) the actuarial surplus in their prepaid college savings programs.

If all actuarial surplus funds remain in the DB529 fund, the FY21 actuarial surplus of $1.6 billion is projected to increase and reach more than $3.7 billion by the end of FY44, when all Legacy Prepaid529 tuition obligations are expected to have been paid. This will increase the already unnecessarily high funded status, and opportunities to put those funds to other higher education uses that could have a substantial beneficial impact will be forgone.

$1.3 billion in DB529 surplus funds could be safely withdrawn over at least five years based on 2021 surplus

Actuarial surplus funds could be removed from the DB529 fund while maintaining a high probability that the fund's assets will be sufficient to meet the programs' liabilities. The amount of surplus funds that could be removed depends on the investment return and tuition growth assumptions used. Using the Virginia529 board's realistic assumptions of 5.5 percent for the investment return and 6 percent for long-term tuition growth annually, approximately $1.3 billion in surplus funds could be removed—over a time period of at least five years—while maintaining a funded status of at least 125 percent (based on the 2021 valuation).

JLARC's independent actuarial and investment consultants recommended that funds be removed from the DB529 fund in annual increments over at least five years, rather than all at once. This approach would spread out the impact on the funded status, ensuring that it does not decline too quickly after funds are removed. It would also help ensure the fund has enough liquid assets to make benefit payments to account holders. The consultants indicated that removing surplus funds incrementally would allow for regular reviews of the DB529 fund to ensure that withdrawing funds continues to be prudent from an actuarial and investment standpoint.

Surplus fund withdrawals should be mandated in law and approved by an independent committee

Specifying the withdrawal of actuarial surplus funds in statute, but making withdrawals subject to review and approval by an independent committee, would ensure appropriate flexibility and fidelity with the General Assembly's intent. Specifying the process in statute would ensure that the withdrawals occur, because they would be required except under certain defined situations or if the independent committee advised against it. This process would provide flexibility, because the independent committee could reduce or pause withdrawals if changing market or tuition conditions showed that removing additional surplus funds would jeopardize the DB529 fund's solvency or liquidity.

DB529 surplus funds from account holder payments could be returned to account holders

Approximately 60 percent of the total actuarial surplus is derived from payments by Legacy Prepaid529 account holders. If $1.3 billion in surplus funds were removed from the DB529 fund, 60 percent (approximately $780 million) could be returned to current and past account holders.

One option for returning actuarial surplus funds to Legacy Prepaid529 account holders would be providing all account holders a minimum tuition benefit equal to at least the enrollment-weighted average tuition (WAT) at all of Virginia's public four-year higher education institutions. This approach would be consistent with the new TTP program. This option would benefit the nearly 30 percent of account holders whose student previously attended a postsecondary institution with lower cost (below-WAT) tuition or whose beneficiary attends a below-WAT institution in the future. However, this option would not fully utilize the surplus funds available from account holders, so additional funds could be returned to account holders in other ways or used to support higher education access and affordability programs.

A second option for returning actuarial surplus funds to Legacy Prepaid529 account holders is to reprice all legacy contracts based on WAT. Account holders could receive a refund if their contract was priced above WAT at the time they purchased the contract. This option would benefit more account holders, because approximately 70 percent of legacy contracts were originally priced above WAT. This was largely because of Virginia529's historical use of a pricing reserve to protect the DB529 fund from lower-than-expected investment returns and higher-than-expected tuition increases.

A third option for returning surplus funds would be to provide Legacy Prepaid529 account holders the same refund for each prepaid contract they purchased. While this option would be administratively simpler, account holders—including those who have already received larger benefits because their beneficiaries attended above-WAT institutions or their contracts were priced below WAT—would receive the same refund per contract as all other account holders.

DB529 surplus funds from fee proceeds could support higher education access and affordability

Approximately 40 percent of the total actuarial surplus is derived from administrative fee proceeds that Virginia529 allocated to the DB529 fund over time to strengthen the fund's solvency. These proceeds largely come from fees associated with Virginia529's savings programs, primarily the national CollegeAmerica program, which is sponsored by Virginia529. If $1.3 billion in surplus funds were removed from the DB529 fund, 40 percent (approximately $520 million) could be used to support higher education access and affordability.

Actuarial surplus funds from administrative fee proceeds (which were largely paid by residents outside Virginia) provide a unique opportunity for Virginia to support a wide variety of programs to enhance higher education access and affordability. The state could use surplus funds to

- provide additional grants and scholarships for the highest financial need students enrolling in a postsecondary institution,
- provide larger progression bonuses to students at four-year institutions as they progress to their sophomore, junior, and senior years,
- establish a pilot program to provide grants for students close to completing a degree but at risk of dropping out because of a financial emergency, or

- expand the availability of support services for students at risk of not enrolling in or completing a postsecondary program.

Creating a dedicated fund for higher education access and affordability would provide flexibility and a long-term funding source

Rather than spending all of the actuarial surplus funds allocated for access and affordability in the years they are withdrawn or shortly thereafter, the funds could be placed in a dedicated fund to support higher education access and affordability, which could function similar to an endowment. A dedicated fund would

- enable the state to assist students over many more years with attending higher education institutions,
- enable the state to address higher education needs as they change over time, and
- allow the surplus funds to be made available to the DB529 fund if concerns arose regarding the fund's solvency or liquidity.

A dedicated higher education fund could provide up to $39 million annually depending on how it is structured. If future Virginia529 administrative proceeds (estimated at $15 million annually based on recent years) were allocated to the fund, even more funding could be available through the dedicated fund annually to support higher education access and affordability. The primary disadvantage of a dedicated fund is that fewer funds would be available in the near term.

State Council of Higher Education for Virginia should make allocations from dedicated fund subject to authorized uses in statute

The State Council of Higher Education for Virginia (SCHEV) is in the best position to effectively make allocations from the dedicated fund to the types of higher education access and affordability programs that the General Assembly has authorized in statute. SCHEV has a mission that aligns with higher education access and affordability, and council members and staff have expertise in higher education. SCHEV could establish an advisory committee to ensure it is making informed decisions when allocating dedicated fund assets. The advisory committee could examine options for allocating funds for access and affordability within the guidelines established by the General Assembly and make recommendations to the council.

Dedicated fund assets could remain in the DB529 fund and be managed by Virginia529

Virginia529 is the most appropriate entity to effectively manage the assets in a dedicated higher education access and affordability fund. Assets must be managed to provide investment earnings to support the fund's purposes. Virginia529 investment staff have experience managing investments for the range of assets, including private market assets, which would be needed to provide sufficient investment earnings. Leaving dedicated fund assets in the DB529 fund, but accounting for them separately, would also ease the need to generate additional liquidity in the DB529 fund.

WHAT WE RECOMMEND

Legislative action

- Direct the removal of actuarial surplus funds from the DB529 fund 1) in annual increments over a period of at least five years, and 2) up to an amount that would maintain an annual funded status of at least 125 percent.
- Establish an independent standing committee with investment and actuarial expertise to review and approve each planned withdrawal based on updated actuarial and liquidity modeling.
- Authorize the use of actuarial surplus funds from the DB529 fund for 1) returning funds to Legacy Prepaid529 account holders and 2) programs supporting higher education access and affordability.
- Use actuarial surplus funds in the DB529 fund that derive from administrative fee proceeds to create a dedicated fund for higher education access and affordability.
- Authorize the types of access and affordability programs that could receive dedicated fund assets and give SCHEV responsibility for allocating funds within these statutory guidelines.
- Direct Virginia529 to manage the investment of dedicated fund assets.

The complete list of recommendations is available on page vii.

Recommendations and Policy Options: Defined Benefit 529 Surplus Funds

JLARC staff typically make recommendations to address findings during reviews. Staff also sometimes propose policy options rather than recommendations. The three most common reasons staff propose policy options rather than recommendations are: (1) the action proposed is a policy judgment best made by the General Assembly or other elected officials, (2) the evidence indicates that addressing a report finding is not necessarily required, but doing so could be beneficial, or (3) there are multiple ways in which a report finding could be addressed and there is insufficient evidence of a single best way to address the finding.

Recommendations

RECOMMENDATION 1

The General Assembly may wish to consider directing in statute the removal of actuarial surplus funds from the Defined Benefit 529 fund 1) in annual increments over a period of at least five years, and 2) up to an amount that would maintain an annual funded status of at least 125 percent for the Legacy Prepaid529 and Tuition Track Portfolio programs through FY44 based on the Virginia529 board's approved investment return and tuition increase assumptions. (Chapter 2)

RECOMMENDATION 2

If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 (DB529) fund in statute, it may wish to consider establishing an independent standing committee that includes members with investment and actuarial expertise to review each planned annual withdrawal using updated actuarial and liquidity modeling and approve each annual withdrawal. Following the planned withdrawals of surplus funds, the General Assembly should direct that the independent standing committee have ongoing responsibility to evaluate the actuarial surplus of the DB529 fund at least every two years for the purpose of determining whether additional surplus funds can be removed subject to maintaining a funded status of at least 125 percent and ensuring adequate fund liquidity. (Chapter 2)

RECOMMENDATION 3

If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 fund to return surplus funds to Legacy Prepaid529 account holders, it may wish to consider amending the Code of Virginia to provide clear statutory authority and direction to Virginia529 that surplus funds can be used to provide refunds to account holders. (Chapter 3)

RECOMMENDATION 4

If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 fund to return surplus funds to Legacy Prepaid529 account holders, it may wish to consider requiring Virginia529 to develop a plan for returning surplus funds to account holders. Virginia529 should provide the plan to the House Appropriations Committee, the Senate Finance and Appropriations Committee, and the Joint Legislative Audit and Review Commission prior to implementing it. (Chapter 3)

RECOMMENDATION 5

If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 (DB529) fund to provide funding for higher education access and affordability programs, it may wish to consider amending §23.1-701.C of the Code of Virginia to specify funding for higher education access and affordability programs as an allowable use of surplus funds derived from administrative fee proceeds allocated by Virginia529 to the DB529 fund. (Chapter 3)

RECOMMENDATION 6

If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 fund to provide funding for higher education programs, it may wish to consider amending §23.1-701.D of the Code of Virginia to provide Virginia529 board members with immunity from legal liability for disbursing surplus funds. (Chapter 3)

RECOMMENDATION 7

If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 fund and designates funds for higher education access and affordability, it may wish to consider establishing in statute a dedicated fund for the purpose of annually allocating surplus funds to meet higher education access and affordability needs. (Chapter 4)

RECOMMENDATION 8

If the General Assembly directs the creation of a dedicated higher education fund with actuarial surplus funds from the Defined Benefit 529 fund, it may wish to consider (i) authorizing in statute the types of access and affordability programs that could receive allocations of dedicated fund assets, (ii) giving the State Council of Higher Education for Virginia (SCHEV) responsibility for making allocations of fund assets within those statutory guidelines, and (iii) directing SCHEV to establish an advisory committee to advise the council on making allocations of dedicated fund assets that comprises individuals with higher education experience and includes a representative of the Virginia Community College System and a representative of Virginia's historically black colleges and universities. (Chapter 4)

RECOMMENDATION 9
If the General Assembly directs the creation of a dedicated higher education fund with actuarial surplus funds from the Defined Benefit 529 (DB529) fund, it may wish to consider directing Virginia529 to manage the investment of fund assets together with DB529 funds but to account for them separately. (Chapter 4)

Policy Options to Consider

POLICY OPTION 1
If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 fund, it could designate 60 percent of removed surplus funds to be returned to Legacy Prepaid529 account holders and 40 percent of removed surplus funds to support higher education access and affordability programs. (Chapter 3)

POLICY OPTION 2
If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 fund and designates funds for Legacy Prepaid529 account holders, it could direct Virginia529 to return funds to account holders whose beneficiary attended, attends, or will attend a higher education institution with tuition that is less than the weighted average tuition at the time of attendance. (Chapter 3)

POLICY OPTION 3
If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 fund and designates funds for Legacy Prepaid529 account holders, it could direct Virginia529 to return funds to account holders whose contract price was higher than the weighted average tuition (WAT) for the difference between the contract price paid and WAT at the time. (Chapter 3)

POLICY OPTION 4
If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 fund and designates funds for Legacy Prepaid529 account holders, it could direct Virginia529 to return to all account holders the same refund for each of the Prepaid529 contracts they purchased. (Chapter 3)

POLICY OPTION 5
If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 fund and designates funds for Legacy Prepaid529 account holders, it could give the Virginia529 board discretion to determine how best to return funds to account holders. (Chapter 3)

POLICY OPTION 6
If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 fund and designates funds for higher education access and affordability, it could use the funds to provide additional grants for high financial need or at-risk students. (Chapter 3)

POLICY OPTION 7
If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 fund and designates funds for higher education access and affordability, it could use the funds to pilot a new state financial aid progression bonus program that requires public higher education institutions to provide bonuses of at least $1,200 to students who re-enroll for their sophomore, junior, and senior years. (Chapter 3)

POLICY OPTION 8
If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 fund and designates funds for higher education access and affordability, it could use the funds to establish a state emergency financial aid program that provides public higher education institutions with grant funding for students who are facing a financial emergency that puts them at risk of dropping out. (Chapter 3)

POLICY OPTION 9
If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 fund and designates funds for higher education access and affordability, the State Council of Higher Education for Virginia could conduct a review to estimate the need for additional support services for at-risk high school and postsecondary students and the annual cost of providing these services. (Chapter 3)

POLICY OPTION 10
The General Assembly could direct Virginia529 to allocate future net administrative fee proceeds to a dedicated fund for higher education access and affordability. The allocation of net fee proceeds could be contingent on the Defined Benefit 529 fund having a funded status of at least 125 percent and having adequate liquidity to meet projected cash flow needs. (Chapter 4)

1 Virginia529's Defined Benefit 529 Fund

The Virginia College Savings Plan Oversight Act requires JLARC to conduct ongoing oversight of Virginia529 and its programs. JLARC's areas of review and evaluation include the structure and governance of the agency; the structure of its investment portfolios; its investment practices, policies, and performance; the actuarial policy and actuarial soundness of its prepaid tuition programs; and the administration and management of its plans.

During the July 2021 JLARC meeting, Commission members approved a motion for JLARC staff to review the extent to which actuarial surplus funds from the Legacy Prepaid529 program can be used to support higher education access and affordability in Virginia. The motion was approved following the FY21 actuarial valuation, which determined that the funded status of Virginia529's defined benefit programs had reached 194 percent. The motion specifically directs JLARC staff to review

- whether the Legacy Prepaid529 program and the new Tuition Track Portfolio program should be combined for actuarial purposes;
- the actuarial implications of using a portion of Legacy Prepaid529 surplus funds to support access and affordability, including an appropriate funded ratio to provide reasonable assurance that the Legacy Prepaid529 program and Tuition Track Portfolio program will remain actuarially sound;
- legal or statutory restrictions on the use of Legacy Prepaid529 actuarial surplus funds;
- the amounts of administrative fee proceeds historically allocated to the Legacy Prepaid529 program, and their subsequent investment earnings; and
- options for using actuarial surplus funds from the Legacy Prepaid529 to support higher education access and affordability in Virginia.

In addition, language in the 2022 Appropriation Act (item 497.D) directed JLARC to review

- evidence of the effectiveness of Virginia529's SOAR Virginia program and other Virginia529 access and affordability efforts involving financial aid-related grants and scholarships and
- whether Virginia529's administrative fee proceeds can best support higher education access and affordability through SOAR Virginia or other state access and affordability programs.

Legacy Prepaid529 contracts cover tuition and fees for a set period, typically ranging from one to eight semesters at a university or college.

The Legacy Prepaid529 contract defines tuition and fees as the normal, full-time, in-state, undergraduate tuition and 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.

To address these study mandates, JLARC staff hired an actuarial firm to assess the impact of removing actuarial surplus funds on the funded status of the Legacy Prepaid529 program; hired an investment consultant to assess how removing surplus funds would affect the liquidity and asset allocation of the fund; hired a law firm to assess the legality of removing surplus funds and reallocating them to higher education access and affordability programs; interviewed staff with Virginia529, the State Council of Higher Education for Virginia, and a Virginia state entity that manages an endowment for specified purposes; analyzed data on Virginia529's SOAR Virginia program; reviewed the literature on support services for improving access to higher education; and reviewed defined benefit college savings programs in other states. (See Appendix B for a description of research methods.)

Virginia529 operates two defined benefit college savings programs

Virginia529 has two defined benefit college savings plans—Legacy Prepaid529, which was closed to new participants in 2019, and a new defined benefit program, Tuition Track Portfolio (TTP), which opened in early 2021. Defined benefit college savings programs provide a guaranteed payout to participants for future college tuition and fees. Both programs require participants to be Virginia residents.

The Legacy Prepaid529 program was open for 24 years before closing in 2019 because of several concerns. Specific concerns included the lack of flexibility for purchasing contracts; the growing disparity in payouts depending on the institution attended; changes in tuition and fee policies at institutions; declining program participation; and the actuarial complexity of the program. Even though the Legacy Prepaid529 program is closed, it will continue to pay benefits for existing participants through FY44, when tuition obligations to contract holders are projected to be complete. As of August 2022, the program had approximately 45,850 open accounts held by more than 27,630 Virginians.

A 2018 JLARC report, **Proposed Change to Payout Model of Virginia's Prepaid529 Program,** found that a weighted average tuition (WAT) model would address several of the concerns identified with the Legacy Prepaid529 program. In 2019, the General Assembly enacted legislation to replace the Legacy Prepaid529 program with a WAT model, and Virginia529 branded the new program as Tuition Track Portfolio.

TTP opened in February 2021 as the successor to the Legacy Prepaid529 program. The TTP program stems from a Virginia529 2016 sustainability study recommending that the Virginia529 board explore replacing the Legacy Prepaid529 program with a weighted average tuition (WAT) model that provides the same payout regardless of the institution the student attends. (Payout amounts under the Legacy Prepaid529 program depend on the institution students attend, with students attending an institution with higher tuition and fees receiving a larger payout.) Using the WAT model, the TTP program pays the enrollment-weighted average tuition at Virginia public universities as the basic contract benefit. The WAT payout is the same for all students, regardless of where they attend college (in-state, out-of-state, public, or private), and may be more or less than the actual cost of tuition and fees at the college attended. The TTP program sells contracts in unit increments, with 100 units equal to one year of weighted average tuition at a public four-year university in Virginia. As of August 2022, TTP had 6,060 open accounts held by approximately 4,110 Virginians.

Virginia529 combines defined benefit plans into DB529 fund

For actuarial and investment purposes, Virginia529 combines its two defined benefit college savings programs into a single Defined Benefit 529 (DB529) fund. Virginia529 operates a single fund for the two programs for several reasons. Combining the programs for actuarial purposes allows Virginia529 to price TTP below its full cost, making the program more attractive and potentially increasing participation. The price of a TTP unit does not account for administrative costs or compensate for the fact that assumed tuition growth (6 percent long term) is higher than assumed investment returns (5.5 percent). TTP also does not include a pricing reserve to protect against risk, such as investment losses or higher than anticipated increases in tuition and fees. In effect, combining the programs makes it administratively simple for Virginia529 to subsidize the TTP program with actuarial surplus funds from the Legacy Prepaid529 program.

Combining the defined benefit programs into a single fund also provides investment benefits for Virginia529. A single fund allows TTP to have an asset allocation that is consistent with an open, mature program, which likely enables it to use a higher investment return assumption. Combining the two programs also simplifies the management of investments because Virginia529 has only one fund to manage.

Legacy Prepaid529 and TTP programs pay future obligations with payments from contract holders and investment returns

Virginia529 must maintain sufficient assets in the DB529 fund to pay the current and future obligations of the Legacy Prepaid529 and TTP programs. These obligations include future benefit payments, refunds, and other payouts. As of June 30, 2021, current and future obligations totaled $1.7 billion for the Legacy Prepaid529 program and $34 million for TTP. Over time, obligations for the Legacy program will decline as remaining account holders receive their benefits. Conversely, obligations for the TTP program will increase as additional units are sold.

The DB529 fund currently has two revenue sources. First, the fund receives investment returns on the assets in the DB529 fund. In FY21, the fund received $624 million in investment income, which represented nearly 90 percent of all fund revenues. Second, the DB529 fund receives payments from Legacy Prepaid529 contract holders making installment payments on semesters purchased and payments from TTP contract holders for units purchased. In FY21, the DB529 fund received $28 million in payments from contract holders, the majority of which was from Legacy Prepaid529 account holders.

If the DB529 fund cannot meet its defined benefit obligations to contract holders, statute requires the governor to include in the budget bill submitted to the General Assembly a sum sufficient appropriation to ensure that the programs meet their obligations.

The appropriation would need to be approved by the General Assembly and repaid by Virginia529 to the state.

Virginia529 staff indicate this would likely be operationalized through a loan from the Virginia Department of Treasury.

DB529 fund previously received proceeds of administrative fees from Virginia529's college savings programs

CollegeAmerica is a defined contribution education savings program offered nationwide under a partnership between Virginia529 and Capital Group, a private mutual fund company. Program participants purchase accounts from private financial advisers. Earnings are tax exempt if used for qualified education expenses.

In previous years, the DB529 fund also received administrative fee proceeds from Virginia529's college savings programs, primarily the CollegeAmerica program (sidebar). Virginia529 uses these proceeds to pay for its annual operating budget, and for many years any fees remaining after covering agency operating expenses were allocated to the DB529 fund (previously the Legacy Prepaid529 fund). Between FY04 and FY19, Virginia529 allocated $353 million in fee proceeds to the fund, an average of about $22 million each year. Net fee proceeds were allocated to the fund to enhance the funded status of the Legacy Prepaid529 program. In FY20, Virginia529 stopped allocating net administrative fee proceeds to the DB529 fund and began using them to fund programs to support higher education access and affordability.

DB529 fund has high funded status, resulting in a substantial actuarial surplus

As of June 30, 2021, the DB529 fund had a funded status of 194 percent, which is almost entirely from the Legacy Prepaid529 program because it is much older and larger than TTP. DB529's high funded status corresponded to an actuarial surplus of a little more than $1.6 billion. Recent market declines have had a modest impact on the funded status of the DB529 fund and its actuarial surplus. As of June 30, 2022, DB529's funded status had declined to 188 percent and the actuarial surplus had declined to approximately $1.4 billion.

An **actuarial valuation** is an analysis that compares the assets and obligations of a defined benefit plan. Actuarial valuations are used to measure the financial health of a plan and may be used by plan sponsors to make decisions about plan design.

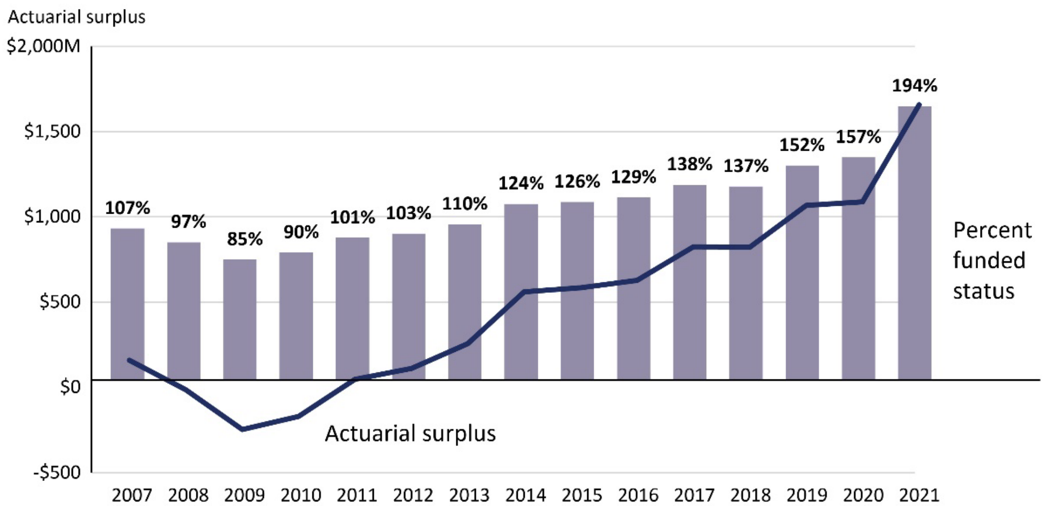
Virginia529 annually estimates the funded status and actuarial surplus (or deficit) of the DB529 fund through an actuarial valuation (sidebar). The funded status is the actuarially determined ratio of assets to projected obligations for a program at a point in time. An actuarial surplus is the best estimate of the present value of the surplus (or deficit) once all current obligations are paid, over time, using the assets currently in the fund. For a defined benefit college savings program, the primary assumptions used to calculate the funded status and actuarial surplus or deficit are the assumed rate of investment returns and the assumed growth rate in college tuition and fees.

While maintaining an actuarial surplus is prudent to help ensure the solvency of the fund, an actuarial surplus that is too large results in forgone opportunities to use the money for beneficial purposes, such as college access and affordability, and only serves to collect investment returns. This is occurring with the DB529 fund, according to an independent actuarial firm.

DB529 fund's funded status has continued to grow over the past decade and is high compared with other states

The funded status of DB529 has steadily increased over the past decade (Figure 1-1). The funded status declined to 85 percent in 2009 following the 2007–2009 recession and major declines in the domestic and international equity and credit markets. The fund recovered to a funded status of more than 100 percent by 2011. It has stayed above 100 percent since and well exceeded 100 percent for the last eight years.

FIGURE 1-1
DB529 fund percent funded status and actuarial surplus or deficit (as of June 30)



SOURCE: Virginia529 actuarial data.
Note: At the time this study was conducted, the most recent valuation data was as of June 30, 2021. Since then, the 2022 valuation has been released showing a funded status of 188% and an actuarial surplus of $1.4 billion.

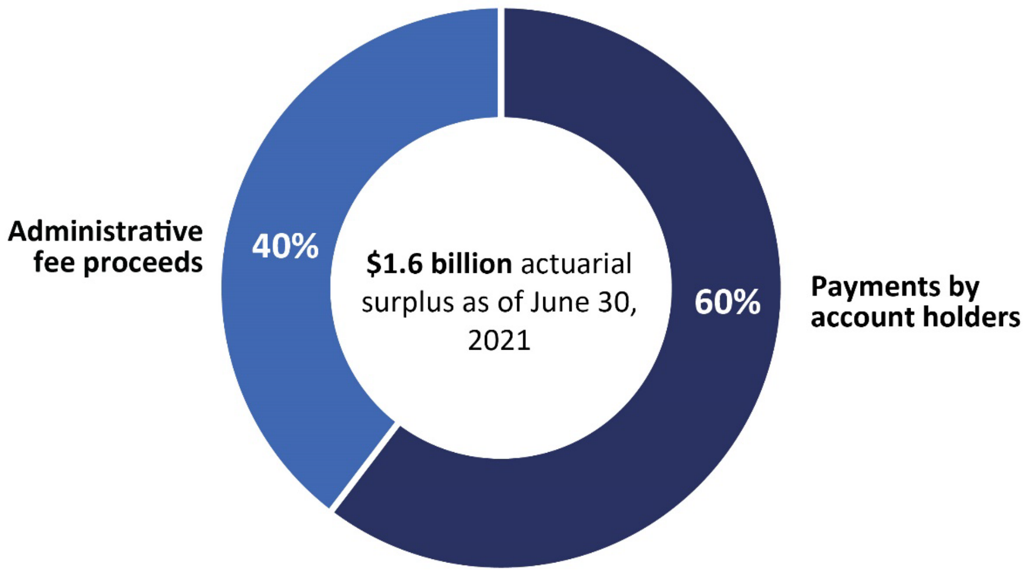
The DB529 fund's actuarial surplus has continued to increase over the past decade. In 2011, when the funded status was 101 percent, the fund had a small actuarial surplus of $10 million. Over the next five years, the actuarial surplus steadily increased to $590 million. The actuarial surplus of the DB529 fund more than doubled between 2017 and 2021, increasing from $787 million to $1.6 billion.

As of June 30, 2021, the DB529 fund had the second-highest funded status nationwide among prepaid programs. In addition to Virginia, at least 10 other states operate prepaid college savings programs, some of which are closed to new participants. Only Michigan's legacy prepaid plan had a higher funded status (227 percent) than Virginia, but the plan is not a relevant comparison because its actuarial surplus ($63 million) was substantially smaller.

Several factors have contributed to the actuarial surplus, which is derived from account holder payments and administrative fee proceeds

The DB529 fund's actuarial surplus comes from the fund's revenue sources (Figure 1-2). Approximately 60 percent of the actuarial surplus ($961 million) is account holder payments for the Prepaid529 semester units and their subsequent investment earnings. The remaining 40 percent of the surplus ($631 million) is administrative fee proceeds Virginia529 allocated to the DB529 fund between FY04 and FY19 and their subsequent investment earnings.

FIGURE 1-2
DB529 actuarial surplus funds are derived from account holder payments and administrative fee proceeds allocated to the fund



SOURCE: JLARC analysis of data from Virginia529.
Note: Actuarial surplus includes investment earnings from payments by account holders and administrative fee proceeds.

Four primary factors have contributed to the high funded status and actuarial surplus:

- ***Administrative fee proceeds.*** Virginia529 contributed more than $350 million in administrative fee proceeds to the DB529 fund between FY04 and FY19, which contributed significantly to the current actuarial surplus. Through May 2022, these fee proceeds had earned an additional $278 million in investment income, bringing the total allocations and investment earnings to account for approximately $631 million of the actuarial surplus funds.
- ***Substantial investment returns.*** The DB529 fund has realized substantial investment returns in recent years and over the long term. Since its inception in 1997, the DB529 fund (previously the Prepaid529 fund) has earned an annualized investment return of 6.2 percent.

- ***Pricing reserves.*** From early in the Legacy Prepaid529 program's history until 2019, Virginia529 added a 10 percent pricing reserve onto the price of Prepaid529 semesters to protect the fund against the risk of lower-than-expected investment returns, higher-than-expected tuition growth, and other potential risks. The pricing reserve was reduced to 5 percent in 2019 following legislation that capped the pricing reserve at no more than 5 percent if the funded status exceeded 105 percent. The legislation implemented JLARC recommendations from 2018 to adjust the pricing reserve in relation to the Legacy Prepaid529 fund's funded status (sidebar).
- ***Moderate tuition growth.*** In recent years, the growth in tuition and mandatory fees at Virginia's public four-year institutions has been substantially less than the growth rate Virginia529 assumes for actuarial purposes. Enrollment-weighted average tuition and fees increased 2.3 percent for the 2021–22 school year, and tuition and fees increased less than 2 percent each of the previous two school years. These increases are well below Virginia529's assumption during this time period that tuition and fees would increase 4 percent the first two years and 6 percent annually thereafter.

The **2018 Virginia529 Oversight Report by JLARC** found that reducing the pricing reserve on future Legacy Prepaid529 contracts would improve program affordability with minimal impact on funded status and actuarial soundness. At the time, Legacy Prepaid529 fund had a funded status of 138 percent.

2 Availability of Defined Benefit 529 Surplus Funds

The high funded status of the Defined Benefit 529 (DB529) fund means that actuarial surplus funds could be removed and used for other beneficial purposes—such as giving refunds to current and past Legacy Prepaid529 account holders and funding higher education access and affordability initiatives—while still maintaining the fund's actuarial soundness. Leaving all surplus funds in the DB529 fund will result in increasing the already unnecessarily high funded status and forgoing opportunities to use those funds for purposes that could have a substantial positive impact.

The amount of surplus funds that could be removed depends on key assumptions, such as the fund's long-term investment return rate, the long-term rate of tuition and fees increases, the underlying liquidity of the total fund, and the time horizon over which funds are removed. The amount that could be withdrawn is ultimately a policy decision that requires balancing potential risk to the fund with benefits of using some of the funds. However, the risks can be mitigated by relying on realistic assumptions and using a sound process for removing surplus funds.

The analysis used to determine the amount of actuarial surplus funds that can be removed is based on the June 2021 actuarial valuation of the DB529 fund, which showed a funded status of 194 percent and an actuarial surplus of $1.6 billion. This was the most recent actuarial information available at the time that JLARC staff, with the assistance of consultants, conducted this study. With the recent market downturn, the DB529 fund has a slightly lower funded status of 188 percent and an actuarial surplus of $1.4 billion, based on the June 2022 actuarial valuation. However, this does not change the overall findings, recommendations, or options in this chapter. Actuarial valuations change annually, reflecting the plan's experience compared to the actuarial assumptions. Therefore, removal of surplus funds would need to be paired with the most recent annual valuation and updated investment modeling.

Gabriel, Roeder, Smith & Company (GRS) is a national actuarial and benefits consulting company with extensive experience working with pension, prepaid college tuition programs, and other defined benefit programs. GRS assessed the funded status of the DB529 fund and conducted actuarial modeling of surplus removal scenarios. (See Appendix B for more information on the analyses conducted by GRS.)

Funded status of DB529 fund is higher than needed to cover future obligations

The actuarial analysis for this study was conducted by JLARC's independent actuary, GRS (Gabriel, Roeder, Smith & Company). The independent actuary determined that the DB529 fund, which is almost entirely made up of the Legacy Prepaid529 program, has more than sufficient assets to cover its actuarial obligations. Unless surplus funds are removed, the surplus will continue growing and collecting investment returns in the fund.

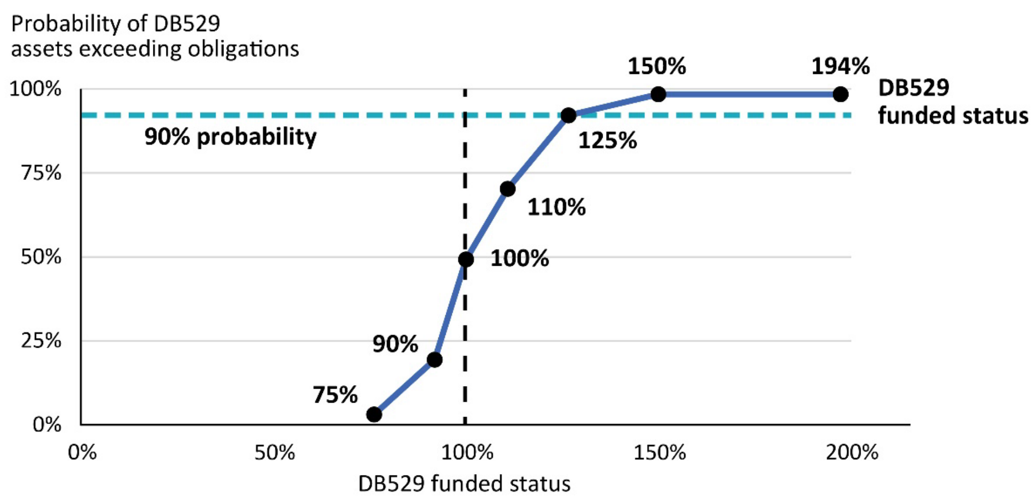
Independent actuary says 125 percent funded status is reasonable for DB529 fund

The **funded status** of a defined benefit fund corresponds to the probability that fund assets will be sufficient to pay all current and future liabilities. In general, a higher funded status equates to a higher probability that assets will be sufficient to meet liabilities.

The appropriate funded status for the DB529 fund depends on the General Assembly's risk tolerance. JLARC's independent actuary advised that a funded status of 125 percent is reasonable for a defined benefit college savings program (sidebar) and provides adequate assurance that Virginia529 will have the assets necessary to meet its obligations. At a funded status of 125 percent, there is a 90 percent probability of having sufficient assets to meet Virginia529's defined benefit obligations.

A funded status of 125 percent is substantially lower than the DB529 fund's FY21 funded status of 194 percent, but both funded statuses equate to nearly the same probability that assets will be sufficient to pay all liabilities (Figure 2-1). Increases in the funded status over 125 percent do not significantly change the probability that assets will be sufficient to pay obligations. At a funded status of 194 percent, the DB529 fund has a greater than 99 percent probability of having sufficient assets to pay obligations; at a 125 percent funded status there is a 90 percent probability. No funded status equates to a 100 percent probability of meeting all obligations.

FIGURE 2-1
Increasing DB529's funded status over 125 percent provides little additional assurance that assets will be sufficient to meet liabilities



SOURCE: FY22 actuarial valuation of DB529 fund.

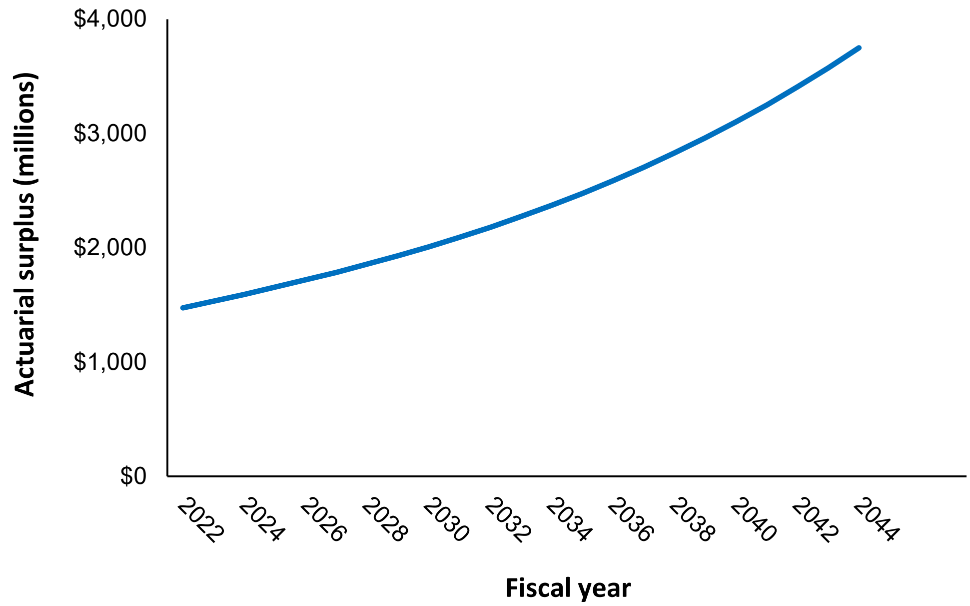
Other states have taken actions to reduce—or have policies to reduce—surpluses in their prepaid college savings programs when the funded status reaches a certain threshold of around 125 percent to 135 percent. Maryland statute requires its prepaid529 board to consider price reductions or rebates for account holders when the funded status is at or above 130 percent. (So far, the board has not elected to provide price reductions or rebates.) In 2020, Florida's prepaid program had a funded status of 137 percent when its board approved approximately $1.3 billion in price reductions and refunds for contract holders. Several factors led to Florida's decision to provide price reductions and refunds, including limited tuition growth relative to the price of prepaid contracts. After the price reductions and refunds, the funded status declined to 127 percent before rebounding to 141 percent following investment gains and no tuition growth.

A 125 percent funded status is higher than what is considered necessary for some other types of defined benefit plans but is appropriate for a defined benefit college savings program, according to JLARC's independent actuary. For example, a funded status of 100 percent is generally considered sufficient for a public employee pension plan. However, pension plans can raise revenue by increasing required contributions from employees and employers. Virginia529 cannot increase income from existing contract holders because the price of a tuition contract is fixed at the time of its sale. Compared to a pension plan, this leaves Virginia529 more dependent on investment earnings and more vulnerable to increased obligations through higher-than-expected increases in tuition and fees.

DB529 fund's actuarial surplus will continue growing if no surplus funds are withdrawn

If all actuarial surplus funds remain in the DB529 fund, the FY21 actuarial surplus of $1.6 billion is projected to increase and reach more than $3.7 billion by the end of FY44, when all Legacy Prepaid529 tuition obligations are expected to have been paid (Figure 2-2). The projected increase in the actuarial surplus occurs primarily because the amount of benefits paid to Legacy contract holders is expected to decrease substantially in future years as these contracts mature. At the same time, investment income is expected to continue accruing at the 5.5 percent rate, on average, currently assumed by the Virginia529 board. This increasing surplus occurs even when accounting for the subsidy from Legacy Prepaid529 to help cover obligations of the Tuition Track Portfolio (TPP) program. (See Chapter 1 for explanation of Legacy Prepaid529's subsidy of the TTP program. See online Appendix D for the amount of actuarial surplus funds needed to ensure that the TTP program remains at a funded status of 125 percent.)

FIGURE 2-2
Actuarial surplus of the Legacy Prepaid529 program is projected to reach $3.7 billion by FY44 if no surplus funds are removed



SOURCE: JLARC analysis of actuarial modeling by GRS.
NOTE: Projection assumes (i) a 5.5 percent annual investment return, (ii) 4 percent tuition growth the first two years and 6 percent growth annually thereafter, and (iii) a discount rate of 5.5 percent. Projection accounts for Legacy Prepaid529's subsidy to maintain a 125 percent funded status of the TTP program. TTP subsidy assumes 450,000 TTP units are sold annually.

State could safely withdraw $1.3 billion in DB529 surplus funds over at least five years based on 2021 surplus

Virginia529 is contractually obligated to pay future tuition and fees for its defined benefit contract holders, so it is critical to be cautious when removing actuarial surplus funds. Independent actuarial and investment consultants advise that the amount of funds removed and the timeframe over which the removal occurs should meet two key criteria. First, the removal of surplus funds should not bring the DB529 fund below a minimum funded status, such as 125 percent, to ensure a high probability that assets will be sufficient to meet obligations. Second, the removal should maintain sufficient liquidity in the DB529 fund to meet benefit payments to account holders.

JLARC staff worked with the independent actuary to determine the amount of actuarial surplus funds that could be removed from the DB529 fund while maintaining the fund's actuarial soundness. The independent actuary considered surplus removal scenarios under a range of investment return and tuition growth assumptions, including scenarios with the most realistic assumptions and scenarios with more conservative assumptions. The more conservative scenarios were part of a "stress test" to model the impact on the fund of removing surplus funds under unfavorable market conditions.

JLARC staff also worked with an independent investment consultant (Callan) to examine the investment implications of removing actuarial surplus funds from the DB529 fund, particularly related to the cash flow needs for making payments to account holders (sidebar). The consultant modeled different scenarios to examine how removing surplus funds in a single year versus over five years would affect the liquidity of the DB529 fund. The consultant also conducted a stress test in which surplus funds were removed amid a market downturn similar to the 2008 financial crisis. (Appendix B provides more information about the analyses conducted by JLARC's independent actuarial and investment consultants.)

Callan is an investment consulting firm that advises on over $4.5 trillion in total assets across 438 institutional clients. Callan conducted investment modeling to determine the amount of surplus funds that can be removed from the DB529 fund while maintaining sufficient liquidity. (See Appendix B for more information on the analyses conducted by Callan.)

The exact amount of actuarial surplus funds that can be removed from the DB529 fund could vary as the funded status and actuarial surplus change each year. As a result, before any surplus funds are removed from the DB529 fund, the actuarial and investment analyses should be updated using the most recent actuarial valuation of the fund.

The **funded status of the DB529 fund** is a blend of the Legacy Prepaid529 and TTP programs. Therefore, if the funded status of each of these programs is at least 125 percent, the funded status of the DB529 fund will be at least 125 percent.

$1.3 billion in surplus funds could be removed while maintaining a funded status of at least 125 percent based on the 2021 surplus

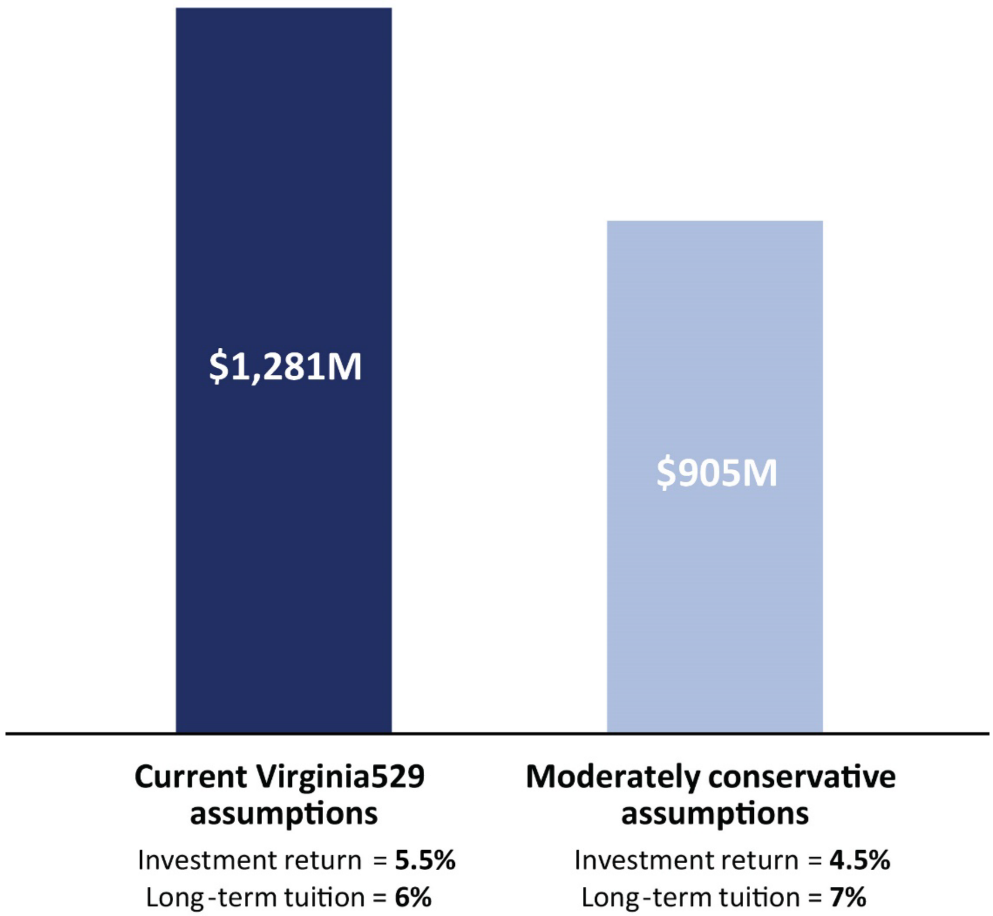
Actuarial surplus funds could be removed from the DB529 fund while maintaining a high probability that the fund's assets will be sufficient to meet the programs' liabilities. The amount of surplus funds that can be removed depends on the investment return and tuition growth assumptions used. Using realistic assumptions of 5.5 percent for the investment return and 6 percent for tuition growth, approximately $1.3 billion in surplus funds could be removed over at least five years based on the 2021 surplus, while maintaining a funded status of at least 125 percent for the Legacy Prepaid529 and TTP programs through FY44 (Figure 2-3). (Online Appendix E includes detailed tables with year-by-year calculations for the surplus removal scenarios discussed in this chapter.)

An investment return of 5.5 percent and long-term tuition growth of 6 percent are realistic assumptions for several reasons. The 5.5 percent annual return assumption is the official return assumption approved by the Virginia529 board for the DB529 fund. The board reviews and approves the return assumption each year in consultation with its investment consultant. JLARC's independent investment consultant also forecasts a 5.5 percent expected return for the DB529 fund based on the fund's current target asset allocation and the consultant's 10-year capital market assumptions.

Virginia529's tuition growth assumption is 4 percent for the 2022–23 and 2023–24 school years and 6 percent annually thereafter. For the actuarial analyses conducted by JLARC's independent actuarial consultant, all tuition growth assumptions used 4 percent for the 2022–23 and 2023–24 school years. Different tuition assumptions were used for school years 2025–26 and after.

A long-term tuition increase assumption of 6 percent annually is reasonable and may be somewhat conservative (sidebar). The 6 percent long-term tuition growth assumption is the official assumption approved by the Virginia529 board for the DB529 programs. The board reviews and approves the tuition growth assumption each year in consultation with the State Council of Higher Education for Virginia. An increase of 6 percent annually is higher than the actual weighted-average growth (5 percent) of in-state tuition and fees at Virginia's higher education institutions for the past 15 years (between 2006–07 and 2021–22).

FIGURE 2-3
$1.3 billion in surplus funds could be removed from the DB529 fund under realistic assumptions, or $900 million under moderately conservative assumptions, based on 2021 surplus



SOURCE: JLARC analysis of actuarial modeling by GRS.
NOTE: Projections assume 4 percent tuition growth the first two years, account for Legacy Prepaid529's subsidy to maintain a 125 percent funded status of the TTP program (assuming 450,000 TTP units sold annually), and use a 5.5 percent discount rate.

Using moderately conservative assumptions for long-term investment returns and tuition growth would still leave nearly $1 billion in actuarial surplus funds that could be safely withdrawn from the DB529 fund. Assuming a long-term investment return of 4.5 percent and a long-term tuition increase of 7 percent annually over the next 20 years, a little more than $900 million in surplus funds could be removed (Figure 2-3).

About half that amount of surplus funds could be removed under more conservative, less likely assumptions. Assuming a long-term investment return of 3.5 percent and a long-term tuition increase of 7 percent annually, $500 million in surplus funds could be removed. This return assumption is a sustained 2 percentage points lower than the return assumption approved by the Virginia529 board and results in lower cumulative investment earnings than if a shorter-term significant market decline akin to the 2008 financial crisis occurs in the next year or two.

Removing surplus funds incrementally over at least five years is prudent from actuarial and investment standpoints

JLARC's independent actuarial and investment consultants both recommended that actuarial surplus funds should be removed from the DB529 fund in annual increments over at least five years, rather than all at once. Removing surplus funds over at least five years would help protect the fund's solvency, ensure there is adequate liquidity to continue meeting obligations to prepaid account holders, and provide the opportunity to reassess conditions each year and pause or reduce additional withdrawals if needed. Both surplus removal scenarios in Figure 2-3 are based on removing funds over a five-year timeframe.

Incremental removal of surplus funds would protect the actuarial soundness of the DB529 fund

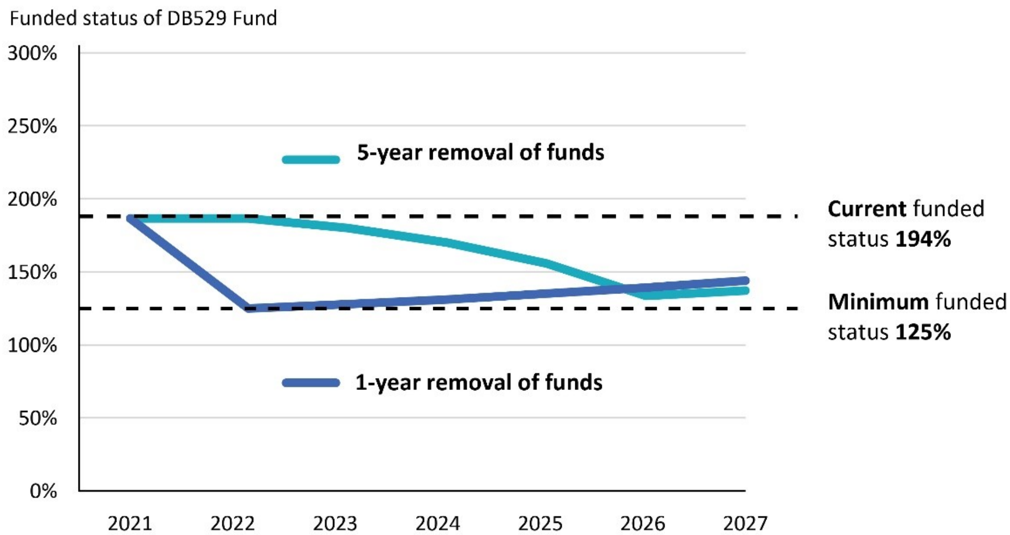
Removing actuarial surplus funds from the DB529 fund over multiple years has three primary actuarial benefits. First, the incremental removal of surplus funds would better protect the actuarial soundness of the fund. Removing funds incrementally over multiple years would spread out the impact on the funded status, ensuring that the funded status does not decline too quickly after funds are removed (Figure 2-4). A fast decline in funded status is more likely to result in solvency problems, particularly if it were followed by large drops in market returns or significant increases in tuition.

Second, removing actuarial surplus funds incrementally rather than in a single year would allow more funds to be removed. Compared with removing surplus funds in a single year, removing funds over five years allows $37 million more in funds to be removed while maintaining a funded status of at least 125 percent. A larger amount of surplus funds can be removed in annual increments because funds remain in the DB529 fund longer, resulting in more investment earnings.

Third, removing actuarial surplus funds incrementally would allow for regular reviews of the DB529 fund to ensure that it is still actuarially prudent to withdraw funds. If investment returns are lower than assumed, or tuition are increases higher than assumed, the withdrawals could be decreased or halted. According to JLARC's independent actuary:

Withdrawing surplus funds over a period of time would allow for review of the updated surplus and funded status at each future actuarial valuation to evaluate whether additional withdrawals of surplus assets is still appropriate given conditions at that time.

FIGURE 2-4
Removing approximately $1 billion in actuarial surplus funds over 5 years avoids a fast decline in funded status



SOURCE: JLARC analysis of actuarial modeling by GRS.
NOTE: Withdrawal scenarios assume a 5.5 percent annual investment return, 4 percent tuition growth the first two years, and 5 percent tuition growth annually thereafter.

Incremental removal of surplus funds would help address liquidity constraints of the DB529 fund

Asset liquidity is the ability to convert an asset into cash. To remove actuarial surplus funds from the DB529 fund, assets must be converted to cash by being sold.

Removing actuarial surplus funds incrementally would help address liquidity (sidebar) constraints, which JLARC's independent investment consultant stated is the fund's biggest challenge for making withdrawals. Virginia529 must meet cash flow requirements to make benefit payments to account holders. Removing actuarial surplus funds would require generating additional cash, nearly all of which would come from the DB529 fund's most liquid asset classes of public equity and fixed income (sidebar). Selling too many of these assets too quickly could leave a disproportionate share of the fund in illiquid assets, such as private equity and real estate. This could make it difficult for Virginia529 to meet its obligations to account holders and risks requiring Virginia529 to sell illiquid assets at a loss. To ensure adequate liquidity in the fund, the investment consultant recommended that the removal of surplus funds should maintain sufficient liquidity to meet at least 10 years of benefit payments to account holders.

The independent investment consultant found that removing $1.3 billion over five years is feasible and would maintain sufficient liquidity in the DB529 fund under normal market conditions. Assuming a 5.5 percent investment return, removing approximately $1.3 billion over five years is projected to cause only a modest reduction in the percentage of assets that are liquid in the first year—from 71 percent to 66 percent (Table 2-1). In the first year, the DB529 fund is projected to have enough liquid assets to make payments to contract holders for more than 20 years. (The consultant was unable to forecast beyond the first year because of the many assumptions that would need to be made.)

TABLE 2-1
Withdrawing $1.3 billion in actuarial surplus funds over 5 years ensures the DB529 fund has sufficient liquidity for benefit payments

Surplus withdrawal scenario	Percentage of fund in liquid assets	Amount of liquid assets (billions)	Years of benefit payments from liquid assets [a]
No surplus funds withdrawn	71%	$2.18	> 20
$1.3 billion in 5 years [b]	66%	$1.81	>20
$1.3 billion in 1 year	43%	$0.73	4

SOURCE: JLARC analysis of investment modeling by Callan based on the DB529 Fund's May 31, 2022 asset allocation.
[a] Years of benefit payments from liquid assets following the first year of surplus fund withdrawals. [b] $1.3 billion in surplus funds is removed in $256 million annual withdrawals for five years.

The DB529 fund would have sufficient liquidity over a five-year withdrawal period because only a portion of the actuarial surplus would be removed each year. This would cause less asset class distortion to the DB529 fund and would provide sufficient time for Virginia529 to rebalance the fund's asset allocation to the target mix of public equity, fixed income, and private market assets. Roughly one-third of private market investments would mature over this time horizon and could also be reallocated to more liquid asset classes to help rebalance the fund, according to the investment consultant.

In contrast, removing $1.3 billion in a single year under normal market conditions would reduce the percentage of liquid assets to 43 percent, leaving Virginia529 with enough liquid assets to cover only four years of benefit payments (Table 2-1). The independent consultant considered this level of asset allocation distortion to be extreme and advised against a one-year withdrawal of $1.3 billion in surplus funds. (Online Appendix F provides more information about how one-year and five-year withdrawal scenarios affect liquidity in the DB529 fund.)

The investment consultant also modeled stress case scenarios assuming a negative 18 percent return in one year. Under a stress case scenario, removing $1 billion or more in surplus funds over one year would essentially eliminate portfolio liquidity. The consultant found that a five-year horizon would provide the portfolio more time to accommodate the disruption and stated that:

> "A five-year withdrawal horizon [compared to a one-year horizon] better insulates the portfolio from the adverse impact of forced selling into stressed market environments as well as facilitates a more measured, thoughtful disposition of assets with less distortion to the plan's target asset allocation."

Under a more cautious approach, actuarial surplus funds could be withdrawn over a timeframe as long as 10 years. According to JLARC's independent investment consultant, a 10-year horizon would provide even more assurance that the fund would have sufficient liquidity to make required benefit payments and rebalance assets to its long-term strategic asset allocation. However, this longer timeframe would mean less surplus funds would be available in the short term to meet higher education objectives.

RECOMMENDATION 1

The General Assembly may wish to consider directing in statute the removal of actuarial surplus funds from the Defined Benefit 529 fund 1) in annual increments over a period of at least five years, and 2) up to an amount that would maintain an annual funded status of at least 125 percent for the Legacy Prepaid529 and Tuition Track Portfolio programs through FY44 based on the Virginia529 board's approved investment return and tuition increase assumptions.

Surplus fund withdrawals should be mandated in law and approved annually by an independent committee

The General Assembly would need to establish a process for removing actuarial surplus funds from the DB529 fund. The process for removing funds should satisfy three criteria. It should

- provide sufficient flexibility to pause removal of funds when doing so would lower the funded status below 125 percent or lower liquidity below the amount needed to meet at least 10 years of benefit payments;
- ensure that statutory intent is met and surplus funds are removed when doing so would not jeopardize the funded status or liquidity of the DB529 fund; and
- minimize the administrative complexity and cost of determining the amount and timing of removal of surplus funds.

Requiring the withdrawal of actuarial surplus funds in statute, subject to annual reviews by an independent committee, would best meet these criteria. This process would help ensure surplus funds are withdrawn but provide the flexibility needed to adjust to market conditions or unanticipated increases in tuition. The General Assembly should give the independent committee discretion to reduce or pause withdrawals if updated actuarial or investment modeling showed that removing additional surplus funds would reduce the funded status of the DB529 fund below an identified threshold or jeopardize its liquidity requirements. The committee could also reduce or pause withdrawals of surplus funds during an extreme market downturn such as a -15 percent total fund investment return in a single year. Such stressed market conditions are not likely to last more than one or two years, according to JLARC's investment consultant, and the committee could approve the full scheduled withdrawal amount once updated modeling showed sufficient fund solvency and liquidity.

The committee could be modeled after the Virginia Debt Capacity Advisory Committee (sidebar) and consist of at least five members:

- the investment director from Virginia529,
- the Virginia state treasurer,
- one staff member each from the House Appropriations and Senate Finance and Appropriations committees, and
- one private citizen with investment or actuarial expertise appointed by the governor.

The **Virginia Debt Capacity Advisory Committee** meets annually to review the amount and condition of the Commonwealth's tax supported debt and recommends the maximum amount of tax-supported debt that may be prudently authorized in future years. The committee includes private citizens with financial expertise who are appointed by the governor as well as the state treasurer, state comptroller, and other members of state government.

This committee could continue monitoring the DB529 fund after the initial round of withdrawals are complete to regularly assess the size of the actuarial surplus and determine whether additional funds could be withdrawn. Even after initial rounds of actuarial surplus funds are removed, substantial surplus funds may continue to accumulate over the long term. This could occur for several reasons, such as a decision to withdraw substantially less than $1.3 billion in surplus funds initially, investment returns consistently outpacing the assumed rate of return, or tuition increases consistently below the assumed rate of increase. The committee could meet every two years, for example, to review the funded status and actuarial surplus of the fund. If additional surplus funds could be withdrawn while maintaining a funded status of 125 percent or higher and meeting liquidity needs, the committee could recommend further withdrawals of actuarial surplus funds and a schedule for withdrawing them.

RECOMMENDATION 2

If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 (DB529) fund in statute, it may wish to consider establishing an independent standing committee that includes members with investment and actuarial expertise to review each planned annual withdrawal using updated actuarial and liquidity modeling and approve each annual withdrawal. Following the planned withdrawals of surplus funds, the General Assembly should direct that the independent standing committee have ongoing responsibility to evaluate the actuarial surplus of the DB529 fund at least every two years for the purpose of determining whether additional surplus funds can be removed subject to maintaining a funded status of at least 125 percent and ensuring adequate fund liquidity.

An independent committee is needed to review and approve withdrawals of surplus funds from the DB529 fund, because the Virginia529 board has demonstrated that it does not have the needed perspective to carry out this responsibility. The board has consistently taken a conservative approach to managing the DB529 fund and has been resistant to addressing the accumulating surplus. For example, the board continued allocating administrative fee proceeds to the fund and adding a pricing reserve for years after the surplus had risen above 125 percent. The board's reluctance may at least partially result from members' view that their approval of any withdrawal of the surplus funds conflicts with their fiduciary duty as trustee of the fund. This lack of willingness to address the accumulating surplus in a meaningful way—or awareness of the need to do so—makes clear that the board as a whole does not have the perspective to serve as the key decision-making authority regarding the removal of surplus funds. Instead, an independent committee is needed with a sufficiently broad perspective to properly balance the need to maintain the solvency of the DB529 fund for contract holders with the need to fully use surplus funds for other beneficial purposes and avoid the unnecessary accumulation of excess surplus funds.

3 Potential Uses of Defined Benefit 529 Surplus Funds

Defined Benefit 529 (DB529) actuarial surplus funds could have a meaningful impact on higher education access and affordability, given the magnitude of funds available ($1.3 billion over five years based on the June 2021 valuation; see sidebar). Surplus funds could potentially be used for a variety of purposes, including in ways not necessarily related to higher education. However, higher education access and affordability seem most appropriate given their direct relation to the source of surplus funds. In addition, JLARC staff were directed to evaluate: (i) returning surplus funds to Legacy Prepaid529 account holders through additional benefits, refunds, and price reductions and (ii) funding programs to improve higher education access and affordability, such as grants for high financial need students. If surplus funds are instead left in the DB529 fund, they will simply continue collecting investment returns, forgoing opportunities to be used for beneficial purposes.

Based on the 2021 actuarial valuation showing an actuarial surplus of $1.6 billion, **$1.3 billion in surplus funds** could be removed from the DB529 fund over five years. For purposes of Chapter 3, this amount is used to determine the surplus funds that could be returned to Legacy Prepaid529 account holders or allocated to higher education programs. Given recent market declines, the amount of funds that could be removed from the DB529 fund is likely somewhat lower. However, this does not change the overall findings, options, and recommendations in this chapter.

DB529 surplus funds could be used in proportion to revenue sources of surplus

Deciding whether and how much of the actuarial surplus funds to allocate to Legacy Prepaid529 account holders versus higher education access and affordability programs is ultimately a policy decision for the General Assembly. For example, all surplus funds could be refunded back to account holders. Another option is to allocate surplus funds based on the revenue sources' proportion of the surplus. Approximately 60 percent of DB529's actuarial surplus derives from Legacy Prepaid529 account holders' payments, so up to 60 percent of removed surplus funds could be used to provide additional benefits, refunds, or price reductions for account holders. The remaining 40 percent of surplus funds could be used to support higher education access and affordability programs, because approximately 40 percent of the actuarial surplus derives from administrative fee proceeds that Virginia529 allocated to the fund.

McGuireWoods is a full service law firm with nearly 200 years of experience assisting clients with a broad range of legal matters. The firm has attorneys in 24 offices in the U.S., Europe, and Asia. (See Appendix B for more information on the analyses conducted by McGuireWoods.)

While the General Assembly could conceivably choose to allocate surplus funds in different proportions, using funds from contract holders for higher education programs may raise questions of fairness and increase legal risks for the state. JLARC's legal consultant determined that to reduce the risk of potential litigation, the state may want to consider limiting surplus funds used for higher education access and affordability to those paid by third parties, such as administrative fees from CollegeAmerica participants, rather than contract holders.

To illustrate different options for using actuarial surplus funds, this report uses the 60/40 allocation of actuarial surplus funds removed from the DB529 fund. For example, if the General Assembly directed the removal of $1.3 billion in surplus funds from the DB529 fund, approximately $780 million in surplus funds (60 percent) could be returned to Legacy Prepaid529 account holders. The remaining $520 million in surplus funds (40 percent) could be allocated to programs supporting higher education access and affordability. If less than $1.3 billion in surplus funds is removed from the DB529 fund, then proportionally smaller amounts of funds could be returned to account holders and used to fund higher education programs.

POLICY OPTION 1

If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 fund, it could designate 60 percent of removed surplus funds to be returned to Legacy Prepaid529 account holders and 40 percent of removed surplus funds to support higher education access and affordability programs.

DB529 surplus funds from account holder payments could be returned to account holders

Current Legacy Prepaid529 account holders are individuals who have not yet received all tuition benefits provided through their Prepaid529 contracts.

Past Legacy Prepaid529 account holders are individuals who have received all tuition benefits provided by their Prepaid529 contracts.

If a total of $1.3 billion in actuarial surplus funds were removed from the DB529 fund, 60 percent (approximately $780 million) could be returned to current and past account holders (sidebar). Virginia529 has stated that Legacy Prepaid529 contracts were appropriately priced given the tuition growth rates at the time contracts were purchased and the long-term rate of return and tuition and fee increases assumed by the Virginia529 board. In addition, according to Virginia529, all beneficiaries have received their contractual tuition benefits. However, with the benefit of hindsight, Legacy Prepaid529 account holders could have been charged lower prices or received higher tuition benefits for the prepaid semesters they purchased, given the substantial actuarial surplus in the DB529 fund. Therefore, actual investment gains and limited tuition growth in recent years provides the opportunity to return a portion of the actuarial surplus to account holders.

Virginia529 staff and their actuary have identified two feasible options for returning surplus funds to Prepaid529 account holders, depending on the benefit they received or the price they paid. A third and more administratively simple option would be to provide the same benefit to all account holders. These options could result in varying amounts of increased tuition benefits, refunds, or price reductions for current or past account holders depending on how they are implemented.

Returning actuarial surplus funds to account holders would have tax implications for the recipients, according to JLARC's legal consultant. Refunds are not considered a qualified distribution for higher education expenses, so recipients would be subject to taxes and penalties on the distribution. This could be avoided by recontributing refunds to another qualified college savings plan.

Surplus funds could provide a higher tuition benefit for students who attended schools with below-average tuition

One option for returning actuarial surplus funds to Legacy Prepaid529 account holders would provide increased tuition benefit payments for students who attended—or will attend—schools with tuition below the weighted average tuition (WAT) of Virginia's public higher education institutions. Under the Legacy Prepaid529 program, the benefit level is based on the specific institution students attend. In some cases, students attended or will attend institutions with tuition below WAT (sidebar). This option would provide refunds or increased benefits only for these contract holders. In addition, this option is consistent with the spirit of the new Tuition Track Portfolio (TTP) program, which provides all contract holders a tuition benefit equal to WAT.

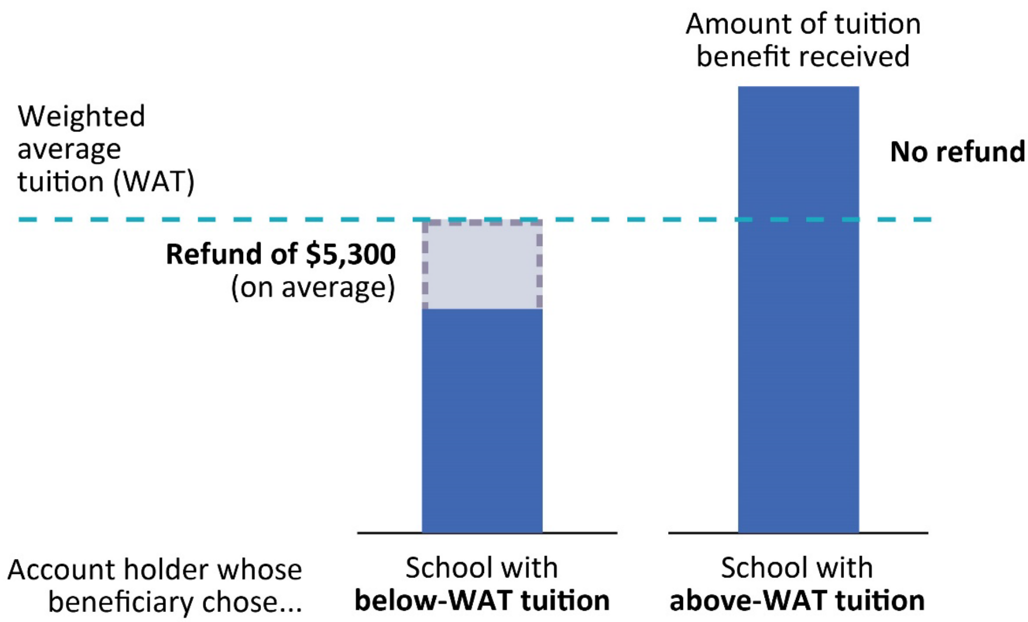
A key concern of the Legacy Prepaid529 program was the large disparity in tuition benefits that account holders receive. Under the Legacy program, account holders whose beneficiaries attend a Virginia public higher education institution receive a payout equal to the tuition and fees at that institution. Given the large disparity in tuition and fee levels among Virginia's public institutions, beneficiaries attending more expensive institutions receive a substantially larger payout than beneficiaries attending less expensive institutions.

Under this option to provide an increased tuition benefit, if a past account holder's beneficiary attended a postsecondary institution with below-WAT tuition, the account holder would receive a refund equal to the difference between the WAT and the institution's tuition at the time the benefit was received (Figure 3-1). The same benefit could be provided to an account holder whose student attends a below-WAT institution in the future. In this case, the beneficiary would likely have funds left over after paying tuition and fees. These account holders could receive a refund, or Virginia529 could allow the additional funds to be used for other tax exempt higher education expenses, such as room and board and textbooks. Past account holders whose tuition benefit was higher than the WAT would not receive a refund or additional benefits. Similarly, current account holders whose beneficiaries attend an above-WAT institution in the future would continue to receive a benefit equal to tuition and fees at that institution.

Slightly less than 30 percent of all current and past Legacy Prepaid529 account holders would be eligible for an additional tuition benefit if it were available for all account holders since the beginning of the program. Virginia529 staff estimate that more than 46,700 contracts would be eligible for a refund or an increased tuition benefit under this option. This is because the majority of Legacy Prepaid529 beneficiaries attend above-WAT institutions. The refund or increased tuition benefit provided to Legacy account holders through the additional benefit option would be about $5,300 per contract on average (and some account holders have multiple contracts), though the actual amount would vary depending on the tuition at the institution the beneficiary attended.

According to Virginia529 staff, making the additional, WAT-based tuition benefit available to all eligible current and past account holders would require approximately $320 million in actuarial surplus funds. The state could also limit the additional benefit payment option to only recent account holders, which would be less administratively complex. If the additional tuition benefit were available only to current account holders, it would require approximately $124 million in surplus funds. Limiting the additional benefit to past account holders who paid for their contracts over the last four years would cost approximately $90 million in surplus funds. This option would not fully use the surplus funds available from account holders, so additional funds could be returned to account holders in other ways or allocated to support access and affordability programs.

FIGURE 3-1
Legacy Prepaid529 account holders could receive a refund or higher tuition benefit if their student attends a below-WAT institution

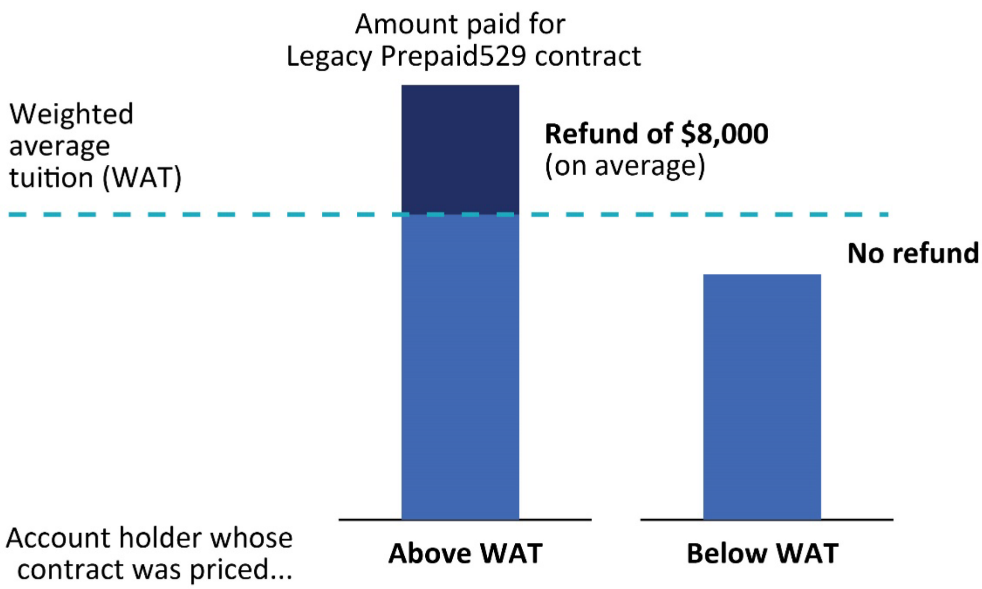


SOURCE: JLARC analysis of information from Virginia529.

Surplus funds could be used to reprice Legacy Prepaid529 contracts, providing a refund for the majority of account holders

A second option for returning actuarial surplus funds to Legacy Prepaid529 account holders is to reprice all legacy contracts based on WAT at the time the contract was purchased. Whereas the previous option would adjust the *benefit amounts* of some account holders, this option would adjust the *price* of some contracts. (This option would also be somewhat consistent with the new TTP program, which prices contracts based on WAT.) For legacy contracts that were originally priced above WAT at the time they were purchased, account holders would receive the difference between the higher price they paid and the lower repriced amount (Figure 3-2). For legacy contracts that were originally priced at or below the WAT at the time, account holders would receive no financial benefit.

FIGURE 3-2
Legacy Prepaid529 account holders could receive a refund if their contract was priced above WAT at the time the contract was purchased



SOURCE: JLARC analysis of information from Virginia529.

Repricing Legacy Prepaid529 contracts based on WAT would return actuarial surplus funds to the majority of legacy contract holders. According to Virginia529 staff, 70 percent of legacy contracts were originally priced above WAT at the time of purchase. The original price of legacy contracts exceeded WAT largely because of Virginia529's previous use of a 10 percent pricing reserve to protect the funded status of the DB529 fund from lower-than-expected investment returns and higher-than-expected tuition increases. In addition, for many years the assumed rate of tuition growth was higher than the assumed investment return for the fund. According to Virginia529, approximately 93,750 legacy contracts were originally priced above WAT at the time of purchase. The price of these contracts exceeded the WAT by an average of about $8,000.

Approximately $744 million in actuarial surplus funds would be needed to return surplus funds to all Legacy Prepaid529 account holders whose contracts were priced above WAT when they were purchased. This estimate, developed by Virginia529, includes the cost of providing a refund to account holders whose contracts were priced above WAT but whose students attended a higher education institution with above-WAT tuition. If refunds were not made available to these account holders because the cost of their contract more closely matches the tuition benefits they received, the cost of the repricing option would likely require a substantially smaller amount of surplus funds.

Another way to provide refunds based on account holders' Legacy Prepaid529 contract prices would be to refund the pricing reserve that most account holders paid. Virginia529's 10 percent pricing reserve is one of the reasons many contracts were priced above WAT, though other factors also contributed. Refunding the 10 percent pricing reserve would likely require a smaller amount of actuarial surplus funds. Virginia529 staff would need to develop detailed cost estimates for this approach by identifying the value of the pricing reserve that each account holder paid. Account holders' refund amounts would depend on the base price of their contracts and the number of prepaid semesters they purchased.

Surplus funds could be returned to all account holders in the same amount

Another option to return actuarial surplus funds to Legacy Prepaid529 account holders would be to provide the same refund for each prepaid contract they purchased. Approximately 133,950 Legacy contracts have been purchased. If $780 million in surplus funds were available for account holders (60 percent of $1.3 billion in surplus funds removed), each contract would be eligible for a refund of approximately $5,800. Account holders who purchased multiple contracts could receive this refund for each of their contracts.

The primary advantage of providing the same refund amount for each Legacy prepaid529 contract is its administrative simplicity. Virginia529 would not have to calculate the additional tuition benefit or refund available to each account holder based on the institution their beneficiary attended or their contract price. However, providing the same refund amount for each Legacy contract would have disadvantages. A key disadvantage is all account holders would receive the same benefit per contract, even those who already received greater benefits because their beneficiaries attended schools with tuition above WAT or because their contracts were priced below WAT.

Virginia529 would face administrative hurdles returning surplus funds to account holders

Each of the options for returning actuarial surplus funds to Legacy Prepaid529 account holders would require a significant administrative effort by Virginia529 staff. Virginia529 may need additional staff or resources, at least in the short term, to implement these options. The increase in operating costs and additional staff needed would depend on how any option is implemented.

According to Virginia529 staff, returning surplus funds to legacy account holders would require the following administrative efforts:

- actuarial analyses to develop updated estimates for the amounts of actuarial surplus funds that would be returned to account holders;

- data analyses to identify the individual account holders who would be eligible for surplus funds and the amount each account holder would be entitled to receive;
- notification to Legacy Prepaid529 account holders of their eligibility for surplus funds and an explanation of how to claim their funds;
- policies for how to proceed if an account holder has died;
- IT application development to process and track claims by Legacy Prepaid529 account holders; and
- expanded customer support services to handle the increased volume of customer inquiries.

Under any option for returning actuarial surplus funds to account holders, Virginia529's board would need to make decisions about account holder eligibility and the logistics of returning funds. For example, under the repricing option, the board would need to decide whether account holders whose prepaid contracts were priced above the WAT at the time they were purchased would be eligible for receiving surplus funds if the student attended an institution with above-WAT tuition. The board would also need to determine the length of time eligible account holders would be able to claim their surplus funds.

Returning surplus funds to Legacy Prepaid529 account holders requires policy choices and statutory direction

Determining whether to return actuarial surplus funds to Legacy Prepaid529 account holders through the additional benefits option, the repricing option, or the same refund to all account holders, is a policy decision for the General Assembly. The options would return surplus funds to different account holders in different amounts and meet different policy objectives. Available surplus funds derived from account holders would not be fully used with some options, and all options would likely have funds that are unclaimed by account holders. As a result, there would be opportunities to return more funds to account holders in different ways or use remaining surplus funds to further support higher education access and affordability programs.

The additional benefit option would return a smaller amount of surplus funds ($320 million) to a smaller proportion of Legacy account holders (30 percent). This option would provide a more equitable distribution of tuition benefits to legacy account holders, addressing one of the main criticisms of the program. Under this option, surplus funds would go to account holders who paid the same price for their prepaid contract as other account holders but who received fewer tuition benefits because their students attended (or will attend) lower-cost institutions. However, this option would not return all surplus funds that are sourced from account holder payments, so remaining funds could be returned to account holders in other ways or used to support higher education access and affordability programs.

In contrast, the repricing option would return a larger amount of surplus funds (more than $740 million) to a larger share of Legacy account holders (70 percent). This option would return surplus funds to account holders who contributed to the actuarial surplus by paying a higher price for their contracts than was needed to keep the program actuarially sound based on the subsequent experience of the program.

Providing the same refund for every Prepaid529 contract would return an even larger amount of surplus funds to account holders ($780 million) in an administratively simple way. However, this option would provide refunds to account holders who have already benefited or will benefit from the program more than other account holders because their students attended or will attend above-WAT institutions—or their contracts were priced below WAT.

POLICY OPTION 2
If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 fund and designates funds for Legacy Prepaid529 account holders, it could direct Virginia529 to return funds to account holders whose beneficiary attended, attends, or will attend a higher education institution with tuition that is less than the weighted average tuition at the time of attendance.

POLICY OPTION 3
If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 fund and designates funds for Legacy Prepaid529 account holders, it could direct Virginia529 to return funds to account holders whose contract price was higher than the weighted average tuition (WAT) for the difference between the contract price paid and WAT at the time.

POLICY OPTION 4
If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 fund and designates funds for Legacy Prepaid529 account holders, it could direct Virginia529 to return to all account holders the same refund for each of the Prepaid529 contracts they purchased.

Alternatively, the General Assembly could simply direct Virginia529 to return a portion of actuarial surplus funds to Legacy Prepaid529 account holders and give the Virginia529 board the discretion to determine how to best return these funds. The board could then determine whether to return surplus funds by providing a refund or additional tuition benefit to account holders whose beneficiary attended an institution with below-WAT tuition, repricing Legacy contracts, using a combination of these approaches, or developing a different approach. Based on preliminary discussions with Virginia529 staff, staff would likely advocate for providing an additional tuition benefit. Staff described this approach as less administratively complex than the repricing option and the most consistent with the new TTP program.

POLICY OPTION 5

If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 fund and designates funds for Legacy Prepaid529 account holders, it could give the Virginia529 board discretion to determine how best to return funds to account holders.

Virginia529 would need statutory authority and direction to return actuarial surplus funds to Legacy Prepaid529 account holders. A substantial actuarial surplus in the Prepaid529 program fund likely was not contemplated when the original statute was drafted, so it addresses only basic functions of the program, such as accepting payments from account holders and investing those funds. Statute does not provide any direction regarding how to return surplus funds to account holders.

Virginia529 staff expressed concern that providing refunds to account holders without clear statutory direction could expose the Virginia529 board and individual members to lawsuits. To minimize the risk of a legal challenge to Virginia529, statute would need to authorize Virginia529's board to return surplus funds to account holders. If the General Assembly wanted to be more prescriptive on how to return surplus funds, statute could further specify

- the amount or proportion of actuarial surplus funds removed from the DB529 fund that could be returned to account holders;
- whether surplus funds would be returned through the additional benefit option, the repricing option, another option, or a combination of options;
- which account holders would be eligible for surplus funds; and
- the methodology Virginia529 would use to determine the amount of funds eligible account holders could receive.

RECOMMENDATION 3

If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 fund to return surplus funds to Legacy Prepaid529 account holders, it may wish to consider amending the Code of Virginia to provide clear statutory authority and direction to Virginia529 that surplus funds can be used to provide refunds to account holders.

Once it had statutory direction, Virginia529 would need to develop a plan for returning surplus funds to Legacy Prepaid529 account holders through the additional benefit or repricing option, another option, or some combination. The plan would need to include

- updated estimates of the amount of actuarial surplus funds needed to implement the option chosen;
- a communications strategy for informing current and past account holders of their eligibility for surplus funds;

- the process account holders would follow to claim and receive their surplus funds; and
- an overall timeline for returning surplus funds to account holders.

Prior to returning actuarial surplus funds to Legacy Prepaid529 account holders, Virginia529 should submit its plan to the House Appropriations Committee, the Senate Finance and Appropriations Committee, and JLARC for review. This would help ensure that surplus funds are returned to account holders consistent with legislative intent.

RECOMMENDATION 4
If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 fund to return surplus funds to Legacy Prepaid529 account holders, it may wish to consider requiring Virginia529 to develop a plan for returning surplus funds to account holders. Virginia529 should provide the plan to the House Appropriations Committee, the Senate Finance and Appropriations Committee, and the Joint Legislative Audit and Review Commission prior to implementing it.

Surplus funds from fee proceeds could support higher education access and affordability

If the General Assembly directed the removal of $1.3 billion in actuarial surplus funds from the DB529 fund, 40 percent (approximately $520 million) could be used to support programs aimed at enhancing higher education access and affordability in Virginia. This 40 percent reflects the percentage of the total actuarial surplus that comes from administrative fee proceeds allocated by Virginia529 to the DB529 fund. There is no requirement that the General Assembly direct the use of surplus funds for this purpose. For example, they could be refunded back to account holders or used for a purpose outside of higher education. However, using them for higher education access and affordability seems appropriate given the source of the surplus funds and Virginia529's mission for higher education access and affordability. In addition, JLARC staff were specifically directed to review using surplus funds for enhancing higher education access and affordability.

Surplus funds from administrative fee proceeds provide a unique opportunity to improve higher education access and affordability

Actuarial surplus funds from administrative fee proceeds provide a unique opportunity to enhance higher education access and affordability in Virginia. While these funds could be used to provide additional benefits, refunds, and price reductions to Legacy Prepaid529 account holders, they are almost entirely unrelated to the Legacy Prepaid529 program and the account holders that purchased prepaid contracts. The administrative fee proceeds have been paid by participants in Virginia529's other college savings programs. Nearly 90 percent of the fee proceeds have been generated by participants in the CollegeAmerica program, which is the largest college savings program in the nation and is sponsored by Virginia529 (sidebar). Approximately 94 percent of CollegeAmerica accounts are held by residents outside Virginia. No other state's 529 program receives the magnitude of fee proceeds that Virginia529 receives from CollegeAmerica.

Virginia receives **administrative fee proceeds from the CollegeAmerica program.** Virginia was one of the first states to create a 529 college savings plan and was presented with the opportunity to sponsor the national CollegeAmerica program, which is sold by private financial advisers. Adviser-sold college savings plans are required by federal law to be operated by a state.

Surplus funds resulting from administrative fee proceeds could fund several types of higher education access and affordability programs

If actuarial surplus funds resulting from administrative proceeds were removed from the DB529 fund over five years, $520 million (40 percent of the total surplus funds removed) would be available in annual increments of $104 million. These funds could be used for a wide variety of programs designed to improve higher education access and affordability, including grants for high financial need (sidebar) or at-risk students, progression bonuses, grants for students facing a financial emergency, and support services for at-risk students.

High financial need students have no ability to pay for higher education (expected family contribution of $0) or minimal ability to pay (expected family contribution of $1–6,000).

The General Assembly would need to determine how to allocate the actuarial surplus funds among these or other similar types of higher education access and affordability programs. Given the unique opportunity and nature of these funds, the General Assembly should ensure that these funds provide additional support for access and affordability and do not simply supplant general funds the state already provides for these purposes. Further, if actuarial surplus funds are used over the five years they are withdrawn, they would provide only a temporary increase in funding for these programs.

Grants for high financial need or at-risk students

The state could use actuarial surplus funds from the DB529 fund to provide additional grants for students enrolling in a postsecondary institution. A lack of adequate financial aid is a common barrier to higher education, particularly for students with high financial need. Surplus funds could be prioritized to increase enrollment and program completion rates among students with high financial need.

Expected Family Contribution (EFC) measures a student's (or their family's) ability to pay for higher education. EFC is calculated by the U.S. Department of Education after students complete the Free Application for Student Financial Aid. Students with a $0 EFC have no ability to pay for higher education and therefore have the greatest financial need.

In FY21, students with no ability to pay ($0 EFC) and students with minimal ability to pay ($1–6,000 EFC) had a total of $144 million in unmet tuition and fee needs. Using the current state financial aid awarding system, approximately $40 million in unmet tuition and fee needs would remain if the full amount of $104 million in actuarial surplus funds was allocated for the tuition and fee needs of these student populations. The additional financial aid funding appropriated for FY24 would likely fully address the tuition and fee needs of students with no or minimal ability to pay without the use of actuarial surplus funds. If the General Assembly continues to appropriate sufficient funds to meet tuition and fee needs beyond FY24, then surplus funds could be used

Cost-of-living needs are a student's higher education costs in addition to tuition and mandatory fees. Examples of cost-of-living needs include room and board and transportation.

to address the cost-of-living needs (sidebar) of high financial need students. For example, the state could provide cost-of-living grants for the more than 20,000 students with no or minimal ability to pay for their higher education.

The state could also prioritize grants for certain categories of students who are at risk of not completing their post-secondary education, such as first generation students. Prioritizing funds for certain types of at-risk students may also help ensure the actuarial surplus funds do not simply supplant general funds that are provided for students with no or minimal ability to pay.

POLICY OPTION 6

If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 fund and designates funds for higher education access and affordability, it could use the funds to provide additional grants for high financial need or at-risk students.

Legacy institutions are the first five public higher education institutions created in Virginia: the University of Virginia, Virginia Tech, William and Mary, Virginia Commonwealth University, and Virginia Military Institute.

Non-legacy institutions are the remaining 10 public higher institutions in Virginia.

If actuarial surplus funds were used to provide additional grant funding for students with no and low ability to pay, the funds could be made available only to students at "non-legacy" institutions (sidebar) who are eligible for federal Pell grants and who likely would have been denied admission to a public institution before 1900 based on admission criteria used at the time, as proposed in legislation introduced during the 2022 General Assembly session (SB 466). However, doing so would eliminate about one-third of the Pell eligible students of color (8,200 of 25,700) from being able to receive the grants.

Progression bonuses for students

The state could use actuarial surplus funds to provide larger progression bonuses through a new state grant program to students at four-year institutions as they progress to their sophomore, junior, and senior years. Public four-year institutions are required by statute to provide progression bonuses to students receiving some types of state financial aid, but the Code of Virginia does not specify an amount. Institutions' bonuses range from $2 to $200 (excluding William & Mary, which provides an annual bonus up to $1,000). These bonuses are too small to affect student behavior. Many students are unaware when they receive the bonus, and researchers have found that substantially higher bonuses of $1,200 to $2,800 are needed to strengthen graduation and retention rates.

Larger progression bonuses could be piloted through a new state grant program funded with actuarial surplus funds. Providing larger bonuses through a new program, rather than through the existing progression bonus structure, would be administratively simpler for higher education institutions and more transparent for students. Awarding a bonus (either flat at $1,200 or increasing so that it is $1,200, $1,500, and $1,800 each year) to students at all public four-year institutions when they progress to their sophomore, junior, and senior years respectively would require between $84 million and $104 million in surplus funds each year. The program could require a substantially smaller amount of surplus funds if it was initially structured as a pilot program and targeted to certain institutions that request to participate or to a specific category of students SCHEV identifies as being at risk of not progressing.

POLICY OPTION 7

If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 fund and designates funds for higher education access and affordability, it could use the funds to pilot a new state financial aid progression bonus program that requires public higher education institutions to provide bonuses of at least $1,200 to students who re-enroll for their sophomore, junior, and senior years.

Grants for students at risk of dropping out because of a financial emergency

Actuarial surplus funds could be used to provide emergency grants for students close to completing a degree program but at risk of dropping out because of financial reasons. Financial difficulty is one of the top three reasons that students choose not to enroll at most of Virginia's public four-year institutions, according to financial aid directors, and it's a common reason students drop out before completing a degree or credential program. Some postsecondary institutions in other states provide grants to students who are close to completing their program but at risk of dropping out. For example, Georgia State University provides an average grant of $900 to students close to completing their degree but with an unpaid financial balance under $2,500. Most of Georgia State's grant recipients (86 percent) graduated after receiving the grant, including over 70 percent within two semesters. Virginia's public four-year institutions have similar programs, and financial aid directors report these programs are successful in helping students complete their degree program. However, funding is from institutional resources and is limited.

Actuarial surplus funds could be used to fund an emergency grant program. Such a program should first be piloted in Virginia to determine if it is effective at increasing graduation rates (sidebar). Approximately 7,800 undergraduate students who enrolled at one of Virginia's public four-year institutions in the 2015–16 academic year dropped out before completing their degree but had at least 75 percent of the credits needed to graduate. Presumably financial difficulty was a key reason many of these students dropped out. If an average grant of $900 was provided to these students, the program would require approximately $7 million in annual funding.

The **JLARC report, *Higher Education Financial Aid Grant Programs and Awards (2022)***, provides more information about implementing a pilot emergency grant program in Virginia.

POLICY OPTION 8

If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 fund and designates funds for higher education access and affordability, it could use the funds to establish a state emergency financial aid program that provides public higher education institutions with grant funding for students who are facing a financial emergency that puts them at risk of dropping out.

Support services for at-risk students

The state could use actuarial surplus funds to expand the availability of support services for students at risk of not enrolling in or completing a postsecondary program. Low-income students, students of color, and first-generation students have traditionally had relatively low postsecondary enrollment and completion rates.

Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) is a college access program that provides support services for low-income students in grades 7–12. Students who enroll in a postsecondary institution may also receive a scholarship.

For high school students at risk of not enrolling in a postsecondary institution, support services are generally aimed at easing the transition from high school to a postsecondary program. Specific services can include financial aid advising, academic supports such as tutoring, academic and career planning, and visits to college campuses. According to the research literature, these support services have the potential to improve postsecondary enrollment and graduation rates for at-risk high school students. Much of the research literature has focused on the federal GEAR UP program (sidebar). Several studies have found that GEAR UP programs are associated with higher postsecondary enrollment and completion rates, but research varies. Some studies find a positive impact and other studies find no or minimal impact.

JLARC's analysis of SOAR Virginia also found that a **substantial proportion of SOAR students did not request disbursement of their $2,000 SOAR scholarship.** Virginia529 program staff noted several recent steps to increase students' use of their scholarship funds.

Virginia529's SOAR Virginia program, which is similar in several respects to the federal GEAR UP program, appears to be effective at increasing access to higher education. SOAR is an early commitment scholarship program that provides at-risk high school students support services and up to $2,000 in scholarship funds for a postsecondary program. JLARC analysis of SOAR data suggests that the program substantially increases student enrollment in postsecondary institutions and recipients' likelihood of earning a degree or diploma. Students who were enrolled in SOAR for three years in high school were 16 percentage points more likely to enroll in a postsecondary institution than students who were enrolled in SOAR for just one year (80 percent versus 64 percent). (Online Appendix G provides more information about the effectiveness and efficiency of SOAR.)

The state could explore using actuarial surplus funds to expand programs that provide support services and early commitment scholarships to at-risk high school students. In recent years, Virginia529 has provided additional funding for these types of programs, including $9.6 million that the Virginia529 board committed in 2021 for this purpose. (Appendix H lists the access and affordability programs for at-risk high school students funded by Virginia529.) More detailed analysis would be needed to develop estimates of the number of at-risk students still in need of support services and early commitment scholarships, and the costs of these additional services.

For students enrolled at a postsecondary institution but at risk of not completing their program, a critical support service is "proactive" advising (sidebar) aimed at identifying students' academic problems and directing them to additional services, such as one-on-one tutoring. Research literature and community college staff broadly support the use of proactive advising services with at-risk community college students, many of whom are low-income or first-generation college students. According to staff with the Virginia Community College System (VCCS), additional funding for advising services in recent years—including $3.75 million provided through Virginia529's access and affordability programs—has enabled them to better meet the advising needs of community college students. However, proactive advising could also benefit at risk students at public four-year institutions, including students of color as well as first-generation, part-time, and older students. More detailed analysis would be needed to determine the extent to which the state's public four-year institutions currently provide proactive advising for at-risk students, the number students in need of proactive advising, the number of additional advisers, and the estimated annual cost of providing this service.

Proactive advising is different from the traditional advising model, which tends to be relatively passive. The proactive adviser initiates frequent contact with students at risk of not completing their postsecondary program.

The **JLARC report, Operations and Performance of the Virginia Community College System (2017)**, found that proactive advising should be expanded in Virginia's community colleges.

Comprehensive support services may be particularly beneficial for first-year postsecondary students at risk of not completing their degree or credential program. Virginia State University and Norfolk State University operate the Virginia College Affordability Network (VCAN) program, which provides free tuition and extensive support services for qualifying first-year students at these institutions. The services include regular meetings with program staff, access to mentorship opportunities, and exposure to a range of campus resources and organizations. The state could explore expanding VCAN to additional institutions with large numbers of at-risk students.

The state could explore **using surplus funds to provide state-subsidized loans for students** in postsecondary programs. State-subsidized loans may be more affordable than loans from private lenders for students and families that have unmet tuition needs. A revolving loan program would be self-sustaining, but it would be complex administratively because it would require the state to develop processes such as providing loan balances, conducting credit checks, and acting on loans in default. The state would also need to conduct a market analysis to determine the demand for such a program.

POLICY OPTION 9

If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 fund and designates funds for higher education access and affordability, the State Council of Higher Education for Virginia could conduct a review to estimate the need for additional support services for at-risk high school and postsecondary students and the annual cost of providing these services.

General Assembly would need to direct the use of surplus funds derived from administrative fees for higher education access and affordability

Virginia statute does not authorize using actuarial surplus funds to support higher education access and affordability programs, likely because a substantial actuarial surplus was not contemplated when the Legacy Prepaid529 program was created. According to analysis from JLARC's independent legal consultant, statute does not authorize removing surplus funds from the DB529 fund for any purpose other than paying prepaid tuition benefits and Virginia529's general operating expenses. Statute further requires that any surplus funds in the DB529 fund at the end of a biennium remain in the fund and cannot revert to the general fund. There are no federal or contract restrictions on removing surplus funds derived from administrative fee proceeds in the DB529 fund (sidebar), according to the legal consultant.

The General Assembly would need to provide statutory direction for removing actuarial surplus funds derived from administrative fee proceeds and reallocating them to other higher education access and affordability programs. Statute would need to be amended to include the removal of surplus funds and their reallocation to higher education programs as an allowable use of DB529 funds.

Federal law does not impose any restrictions on removing actuarial surplus funds resulting from administrative fee proceeds and reallocating them as long as the funds are used by state entities, which are tax exempt.

Virginia529's **contractual agreement** with defined benefit contract holders does not impose any additional limitations on removing and reallocating surplus funds beyond the limitations currently in statute. However, Virginia529 may need to amend contractual agreements to be consistent with changes in law that the General Assembly may make.

RECOMMENDATION 5

If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 (DB529) fund to provide funding for higher education access and affordability programs, it may wish to consider amending §23.1-701.C of the Code of Virginia to specify funding for higher education access and affordability programs as an allowable use of surplus funds derived from administrative fee proceeds allocated by Virginia529 to the DB529 fund.

Because Virginia529 board members are fiduciaries for the DB529 fund, it may be necessary to provide them legal immunity for disbursing actuarial surplus funds for higher education access and affordability programs, according to JLARC's independent legal consultant. Liability protection could be similar to the protection already provided in §23.1-706(D) of the Code of Virginia, which provides immunity for board members as they make investment decisions regarding fund assets. Under this provision, members of the board and investment staff cannot be held personally liable for any losses to the DB529 fund as long as they act in accordance with the standard of care described in statute.

RECOMMENDATION 6

If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 fund to provide funding for higher education programs, it may wish to consider amending §23.1-701.D of the Code of Virginia to provide Virginia529 board members with immunity from legal liability for disbursing surplus funds.

4 Creation of a Dedicated Higher Education Access and Affordability Fund

Rather than spending all of the actuarial surplus funds allocated for higher education access and affordability in the years they are withdrawn or shortly thereafter, the surplus funds could be placed in a dedicated fund and used over decades or in perpetuity, similar to an endowment. (The 40 percent of surplus funds resulting from administrative fee proceeds is assumed to be available for a dedicated higher education access and affordability fund.) A dedicated fund has numerous advantages, including flexibility and providing a long-term source of funds to support higher education access and affordability. In addition, dedicated funds could be left in the DB529 fund and invested by Virginia529, which would ease the need for additional liquidity in the near term. The General Assembly would need to create an informed and robust process for allocating the funds over time. The primary disadvantage of a dedicated fund is that far fewer funds would be available in the near term.

Dedicated fund would provide flexibility and long-term source of funds for access and affordability

A dedicated fund modeled after an endowment would provide funds over a longer period of time and increase the flexibility in how the funds could be used to meet the state's higher education access and affordability needs. It could also be used to help consolidate access and affordability efforts across the state. Importantly, the creation of a dedicated fund would also mean that surplus funds from the Defined Benefit 529 (DB529) fund would not be entirely spent over a short period of time, so they could be made available if concerns arose regarding the DB529 fund's solvency or liquidity.

Dedicated fund would provide funding over a longer period and increase flexibility

Using actuarial surplus funds to create a dedicated higher education fund would have three primary advantages compared with spending the funds as they are removed from the DB529 fund. A dedicated fund would

- ***enable the state to assist students over many more years*** with attending a higher education institution and completing a degree or credential program. In contrast, spending surplus funds over five years as they are removed from the DB529 fund would benefit students over a much shorter timeframe.
- ***enable the state to address higher education needs as they change over time***. The types of programs that best assist students with enrolling in and

completing a postsecondary program may change over time, and funding from a permanent dedicated fund could adapt to meet these changing needs.

- ***allow surplus funds to be made available to the DB529 fund if concerns arose regarding the fund's solvency or liquidity.*** Even though the actuarial surplus funds would be removed from the DB529 fund over a relatively short period, they would not be fully spent during that period. Therefore, they could be made available to the DB529 fund if there were significant market drops or large increases in tuition and fees that placed the solvency and liquidity of the fund in jeopardy.

The amount of funding available for higher education access and affordability each year would depend on the dedicated fund's structure. If a 20-year fund were created with $520 million (the approximate 40 percent of actuarial surplus funds resulting from the administrative fee proceeds), the fund could provide approximately $39 million annually for higher education programs over two decades (Table 4-1). A permanent fund could provide $16 million annually in perpetuity. This amount is based on a 3 percent annual spending rate and a 2.5 percent annual inflation rate, which could be supported by a 5.5 percent investment return on fund assets.

TABLE 4-1
Dedicated fund could provide up to $39 million annually for higher education access and affordability

Dedicated fund lifespan	Annual funding from dedicated fund (millions)
20 years	$39
In perpetuity	$16

SOURCE: JLARC analysis of modeling by GRS.
Note: All scenarios assume an annual investment return of 5.5 percent on fund assets.

RECOMMENDATION 7
If the General Assembly directs the removal of actuarial surplus funds from the Defined Benefit 529 fund and designates funds for higher education access and affordability, it may wish to consider establishing in statute a dedicated fund for the purpose of annually allocating surplus funds to meet higher education access and affordability needs.

While a dedicated fund has numerous advantages, it would provide less funding each year in the near term for access and affordability programs than if surplus funds were spent as they were removed from the DB529 fund. For example, if $39 million from a dedicated fund were allocated to grants for high financial need students, this would have addressed a little more than one-fourth of the tuition and fee needs of these students in FY21 compared with addressing more than two-thirds of needs if the full $100 million withdrawn were used. Similarly, if the funds were used to provide cost-of-living grants, less of the need could be met annually if distributed over a longer period of time. However, the surplus funds distributed through a dedicated fund would be provided for a much longer period to many more students.

Future Virginia529 administrative fee proceeds could be allocated to a dedicated fund to increase the funds available

Available resources from a dedicated higher education fund could be increased if future administrative fee proceeds from Virginia529 were added to the fund (Table 4-2). After covering its annual operating budget, Virginia529 has had about $15 million in administrative fee proceeds remaining annually in recent years (sidebar). If this estimated $15 million were allocated to a dedicated higher education fund each year, the fund could provide up to $54 million in total annual funding, depending on the fund's lifespan.

Virginia529's administrative fee proceeds largely come from its sponsorship of the national CollegeAmerica program. CollegeAmerica fees are paid almost entirely by program participants living outside Virginia.

TABLE 4-2
With future administrative fee proceeds, dedicated fund could provide up to $54 million annually for higher education access and affordability

Dedicated fund lifespan	Annual funding from dedicated fund (millions)
20 years	$54
In perpetuity	$31

SOURCE: JLARC analysis of modeling by GRS.
Note: All scenarios assume an annual investment return of 5.5 percent on fund assets.

Allocating future administrative fee proceeds to a dedicated fund would provide for a more consolidated process for determining how to use administrative fee proceeds for higher education access and affordability. Virginia529 has used these net administrative fee proceeds to support higher education access and affordability since FY20 (see Chapter 3) and has committed to providing $13.3 million during FY21–23 for seven programs that provide support services to students at risk of not enrolling in or completing a postsecondary program (online Appendix H). If future net administrative fee proceeds were transferred to a dedicated higher education fund, all of the potential access and affordability needs could be considered together, and then decisions made about the highest priorities. The fund could continue to provide resources to the programs Virginia529 currently supports if they compared favorably to other potential uses of a dedicated fund.

Allocating Virginia529's net fee proceeds to a dedicated higher education fund could be contingent on the funded status of the DB529 fund. To protect the actuarial soundness of the DB529 fund, the General Assembly could require that net fee proceeds be allocated to the DB529 fund, rather than a dedicated access and affordability fund, if the funded status dropped below 125 percent or liquidity needs were not met.

POLICY OPTION 10

The General Assembly could direct Virginia529 to allocate future net administrative fee proceeds to a dedicated fund for higher education access and affordability. The allocation of net fee proceeds could be contingent on the Defined Benefit 529 fund having a funded status of at least 125 percent and having adequate liquidity to meet projected cash flow needs.

State Council of Higher Education for Virginia should allocate funds subject to statute

If a dedicated higher education fund were created, the state would need an informed and robust process for allocating funds to help ensure they support the most effective access and affordability programs. A dedicated fund could be used to support a broad range of higher education programs, including grants for high financial need students and grants for students at risk of dropping out for a financial emergency, and these needs could change over time.

Statute could authorize broad uses of a dedicated access and affordability fund but give discretion to a state entity

There are two ways assets in a dedicated fund could be allocated to higher education programs each year. The General Assembly could specify in statute which program(s) should receive dedicated fund assets and—if there are multiple programs—how funds should be allocated among them. This approach would ensure that the funds are used consistent with legislative intent and would also minimize administrative complexity. However, it would not be very flexible or adaptable to changing higher education needs over time.

Alternatively, a new or existing state entity could determine how dedicated fund assets should be used within parameters set by the General Assembly. This approach would likely result in the most effective allocation of dedicated fund assets over time, particularly given the long lifespan of a dedicated fund. Statute could broadly authorize the types of higher education programs that could receive dedicated fund assets, and this entity could determine the specific programs and funding levels each year within these statutory guidelines. Under this approach, the entity would have the flexibility to adapt to changing higher education needs over time and adjust the allocation of funds to best meet those needs.

This approach would be similar to that used for the Tobacco Indemnification and Community Revitalization endowment. Statute authorizes broad uses for these funds, such as revitalizing tobacco dependent communities, and the Tobacco Region Revitalization Commission determines the programs and priorities to fund within these guidelines. Commission staff said this flexibility in statute allows the commission to best meet the changing economic development needs of Southern and Southwest Virginia over time.

State Council of Education for Virginia is most appropriate entity for determining how to allocate dedicated fund assets

If a state entity is given discretion to determine how to allocate assets available through a dedicated higher education fund, the entity selected should satisfy three key criteria. First, the entity's mission should include improving higher education access and affordability, and it should have staff expertise in the state's higher education programs and the challenges facing students. Second, the entity should have sufficient independence from the decision-making process for removing actuarial surplus funds from the DB529 fund so it can make objective decisions about their use. Third, the entity should minimize the administrative complexity and cost of determining how surplus funds are used.

The State Council of Higher Education for Virginia (SCHEV) is in the best position to effectively allocate assets available through a dedicated fund for higher education programs (Table 4-3). SCHEV has a mission that aligns with higher education access and affordability. As the state's coordinating body for higher education, SCHEV's statutory mission is to

> advocate for and promote the development and operation of an educationally and economically sound, vigorous, progressive, and coordinated system of higher education in the Commonwealth and lead state-level strategic planning and policy development and implementation based on research and analysis[.]

A key statutory responsibility of SCHEV is maintaining a statewide strategic plan for Virginia's higher education system. SCHEV staff use the strategic planning process to assess the access, affordability, and quality of the higher education system, and make recommendations for improving it. SCHEV could use this planning process to help determine how to most effectively allocate dedicated fund assets to support access and affordability.

TABLE 4-3
SCHEV meets nearly all criteria for the most appropriate state entity to allocate assets available through a dedicated higher education access and affordability fund

Criteria	Description	SCHEV	Virginia529	New entity
Mission & staff expertise	Mission and staff expertise should encompass higher education access and affordability programs	◕	◐	●
Objectivity	Sufficient independence from surplus removal process to make objective decisions about the use of funds	●	○	●
Administrative simplicity	Minimizing administrative complexity and cost to determine how funds should be used	●	●	○

SOURCE: JLARC analysis.

SCHEV council members and staff have expertise in higher education. Council members have experience in the higher education system, often through leadership positions at higher education institutions. SCHEV staff know the numerous state programs supporting higher education access and affordability and also maintain much of the data that is used to assess student need. For example, staff maintain the state's formula for allocating grants to students at public institutions.

In addition, SCHEV would be independent from the process of removing surplus funds from the DB529 fund. The council members would not be involved in whether and how much funds to withdraw. As a result, the decisions over the withdrawal of funds and the use of the funds would be completely independent and have appropriate checks and balances.

As an existing state agency, SCHEV also meets the criterion for administrative simplicity for allocating funds available through a dedicated higher education access and affordability fund. SCHEV already has an existing infrastructure, including an executive director, staff administration, finance, IT support, and communications.

Giving Virginia529 responsibility for allocating surplus funds through a dedicated higher education fund would be administratively simple, but it does not align as well with the agency's mission and expertise. Virginia529's core mission is enhancing higher education access and affordability through college savings programs. In recent years, its mission has expanded to include additional savings programs, such as disability savings programs and a state-sponsored private retirement program. The expertise of Virginia529's board and staff is primarily in administering and overseeing these programs and managing the assets underlying them. While Virginia529 staff have developed some expertise on higher education student financial need, they are essentially reliant on the data and information available from other key stakeholders, particularly SCHEV. In addition, Virginia529 would not be independent from decisions regarding the removal of surplus funds.

A new entity could be created with the appropriate mission, expertise, and objectivity to make decisions about the use of a dedicated higher education fund, but this option is not administratively simple or efficient. Creating a new entity would mean replicating many functions and staff positions that already exist at other agencies, such as SCHEV. In addition, such an entity would likely need to rely on SCHEV staff for expertise and data.

To ensure the council is making informed decisions about allocating surplus funds from a dedicated fund, SCHEV could establish an advisory committee. The advisory committee could examine options for allocating funds for access and affordability within the statutory guidelines established by the General Assembly and make recommendations to the council. The advisory committee should comprise higher education representatives, including a representative of the Virginia Community College System and a representative of Virginia's historically black colleges and universities; a representative of the K–12 education system; a representative from Virginia529; and service providers. In addition, SCHEV could need up to two additional full-time equivalent staff to support the council and advisory committee with this new responsibility.

RECOMMENDATION 8

If the General Assembly directs the creation of a dedicated higher education fund with actuarial surplus funds from the Defined Benefit 529 fund, it may wish to consider (i) authorizing in statute the types of access and affordability programs that could receive allocations of dedicated fund assets, (ii) giving the State Council of Higher Education for Virginia (SCHEV) responsibility for making allocations of fund assets within those statutory guidelines, and (iii) directing SCHEV to establish an advisory committee to advise the council on making allocations of dedicated fund assets that comprises individuals with higher education experience and includes a representative of the Virginia Community College System and a representative of Virginia's historically black colleges and universities.

Dedicated higher education fund assets should remain in the DB529 fund and be managed by Virginia529

Assets of a dedicated higher education fund should be managed to provide investment earnings to support the fund's purposes, according to an independent investment consultant. Ensuring sufficient investment earnings is particularly important in later years if there are no longer regular contributions from the DB529 after some period of time. Funds would need to be invested in multiple asset classes, including private market assets such as private equity and private real estate, according to the investment consultant.

Virginia529 is the most appropriate entity to effectively manage the assets in a dedicated higher education fund. Virginia529 investment staff have experience managing investments across all asset classes, including private market assets as well as public equity and fixed income assets. Other state agencies with investment expertise are not good alternatives for managing a dedicated fund. The Virginia Retirement System (VRS) has staff with extensive experience managing a broad range of asset classes. However, VRS could not manage a dedicated higher education fund because doing so would conflict with the exclusive benefit rule in the state Constitution (sidebar). The Virginia Department of Treasury is not a good option because investment staff primarily have expertise in fixed income, and not in other asset classes, such as public and private equity and real estate.

The **exclusive benefit rule** is a provision in the state Constitution (Article X, Section 11) that requires retirement system funds to be managed solely in the interests of the retirement system members and beneficiaries.

Giving Virginia529 responsibility for managing the assets of a dedicated higher education fund also has advantages compared with using an outsourced chief investment officer (CIO). Outsourcing the management of the dedicated fund assets likely would cost more than having the same assets managed by Virginia529. In addition, according to JLARC's independent investment consultant, the assets could remain in the DB529 fund and be commingled with DB529 funds (though accounted for separately) if Virginia529 managed the dedicated fund. This would ease the need for additional liquidity in the fund, because actuarial surplus funds would not need to be liquidated until they are used to pay for higher education access and affordability programs. If fund assets remained in the DB529 fund, they could also easily be made available to strengthen the solvency of the fund if its funded status dropped below 125 percent.

If a dedicated higher education fund were managed by Virginia529, fund assets might need to have the same asset allocation and investment return assumption as the broader DB529 fund, at least initially. According to the independent investment consultant, if the fund needed a different asset allocation and return assumption from the broader DB529 fund, Virginia529 could explore options for directly managing fund assets with a more customized asset allocation and investment return.

RECOMMENDATION 9

If the General Assembly directs the creation of a dedicated higher education fund with actuarial surplus funds from the Defined Benefit 529 (DB529) fund, it may wish to consider directing Virginia529 to manage the investment of fund assets together with DB529 funds but to account for them separately.

Appendix A: Study mandates

Study resolution agreed to by JLARC, July 6, 2021

In light of the Virginia529 Prepaid529 program's actuarially funded ratio of 157 percent and its surplus of $1.1 billion, which is projected to be $3.8 billion by the end of FY44, JLARC staff are directed to review the extent to which Prepaid529 surplus funds can be used to support higher education access and affordability in Virginia. The review shall include, but not be limited to:

(1) whether the Prepaid529 program and the new Tuition Track Portfolio program should be combined for actuarial purposes;

(2) the actuarial implications of using a portion of Prepaid529 surplus funds to support access and affordability, including an appropriate funded ratio to provide reasonable assurance that the Prepaid529 program and Tuition Track Portfolio will remain actuarially sound;

(3) legal or statutory restrictions on the use of Prepaid529 surplus funds;

(4) the amounts of net operating fee revenue historically allocated to the Prepaid529 program, and their subsequent investment earnings;

(5) options for using additional Prepaid529 surplus funds to support higher education access and affordability in Virginia; and

(6) other relevant topics identified during the course of the review.

Item 497.D of the 2022 Appropriation Act

As part of its ongoing review of access and affordability of higher education in Virginia, the Joint Legislative Audit and Review Commission (JLARC) is hereby directed to review (i) evidence of the effectiveness of the SOAR Virginia program and other Virginia College Savings Plan access and affordability efforts involving financial aid-related grants and scholarships, and (ii) whether the net operating revenue of Virginia College Savings Plan can best support higher education access and affordability through SOAR or other state access and affordability programs.

Appendix B: Research activities and methods

Key research activities performed by JLARC staff for this study included:

- contracting with consultants to (1) conduct actuarial analyses related to removing surplus funds from the Defined Benefit 529 (DB529) fund; (2) analyze the impact of surplus fund removals on the liquidity and asset allocation of the DB529 fund; and (3) assess the legality of removing actuarial surplus funds and reallocating them to higher education access and affordability programs;
- structured interviews with Virginia529 staff and other Virginia state agency staff, other states with prepaid529 and related college programs, and SOAR Virginia access providers;
- review of research literature on support services for students at risk of not enrolling in or completing a postsecondary program;
- data analysis on how surplus funds could be used to support higher education access and affordability, and the outcomes of students participating in the SOAR Virginia program;
- attendance at Virginia529 board and committee meetings; and
- document reviews.

Contracted with consultants

JLARC staff contracted with three different consultants to obtain actuarial, investment, and legal expertise that was necessary to conduct this study.

Gabriel, Roeder, Smith & Company (GRS)

JLARC contracted with GRS to provide the actuarial analysis needed for the study. GRS has significant actuarial expertise in prepaid tuition plans. Two large actuarial firms, one of which is GRS, serve as the plan actuary for most state prepaid tuition plans. (The other large firm, Milliman, is Virginia529's plan actuary.) GRS has significant experience with Virginia529 because it has conducted the three actuarial audits of Virginia529 that JLARC has been statutorily required to perform since 2013. The findings from these prior audits led to the current study.

JLARC hired GRS to assess, from an actuarial perspective, the extent to which Prepaid529 surplus funds can be withdrawn and used to support higher education access and affordability in Virginia. Among other things, GRS's review addressed:

- The benefits and drawbacks of combining the Legacy Prepaid529 program and the Tuition Track Portfolio (TTP) for actuarial purposes versus keeping them separate, including the impact on options regarding the use of Prepaid529 surplus funds.
- The funded status for the Legacy Prepaid529 program and TTP if the two programs were actuarially separate.
- The amount of administrative fee proceeds that Virginia529 has allocated to the Legacy Prepaid529 program since the program's inception and the investment earnings that have resulted from these allocations.

- The amount of the DB529 fund surplus that is attributable to the allocations of administrative fee proceeds and subsequent investment earnings based on the 2021 actuarial valuation, and the amount this is projected to be by FY44.
- The amount of surplus funds that could be removed from the DB529 fund while still maintaining the actuarial soundness of the Legacy Prepaid529 and TTP programs. This analysis included stress tests of various scenarios using different assumptions for amounts withdrawn from the fund, future investment returns, tuition growth, and the resulting funded status of the Legacy Prepaid529 and TTP programs under each scenario.
- Options for the withdrawal of surplus funds, such as in a lump sum or on a phased schedule, and the implications of these options from an actuarial perspective.
- Options for creating a higher education endowment or dedicated fund with actuarial surplus funds, including the amounts of funding available under different lifespans for an endowment or dedicated fund.

Callan

JLARC staff contracted with Callan, a national investment consulting firm, to assess the investment implications of removing actuarial surplus funds from the DB529 fund. The review focused on the impact that removing actuarial surplus funds would have on the fund's liquidity, risk level, and asset allocation. Callan's review analyzed:

- asset class and strategy sources of funds for withdrawal.
- two withdrawal timing scenarios—all at once versus a longer time horizon, such as five years—in the context of existing contract obligations as detailed in the 2021 actuarial valuation for the DB529 fund.
- withdrawal scenarios under normal market conditions and stressed market conditions to project changes in liquidity, risk, and asset allocation in the first year that surplus funds are removed. The stressed market scenarios were based on a negative 18 percent investment return in the first year surplus funds are removed.
- how an endowment or dedicated fund created from actuarial surplus funds resulting from administrative fee proceeds could be managed from an investment perspective.

McGuireWoods LLC

JLARC staff contracted with McGuireWoods LLC to consult on several legal issues related to the treatment and use of actuarial surplus funds in the DB529 fund. McGuireWoods's analysis focused primarily on the surplus funds resulting from administrative fee proceeds. Among other things, the McGuireWoods review:

- determined whether the provisions in the Code of Virginia, federal law or regulations, or contracts with Legacy Prepaid529 account holders prohibit or otherwise affect the *removal* of surplus funds attributable to administrative fee proceeds;
- determined whether the provisions in the Code of Virginia, federal law or regulations, or contracts with Legacy Prepaid529 account holders prohibit or otherwise affect the *use* of

surplus funds attributable to administrative fee proceeds for other higher education initiatives;

- determined whether the provisions in the Code of Virginia, federal law or regulations, or contracts with Legacy Prepaid529 account holders prohibit or otherwise affect the use of surplus funds (either those attributable to administrative fee proceeds or payments made by Legacy Prepaid529 account holders) to support the actuarial soundness of TTP;
- recommended how the Code of Virginia could be amended to authorize (1) the removal of surplus funds attributable to administrative fee proceeds and (2) their use for other higher education initiatives; and
- generally assessed the legal risks of removing actuarial surplus funds from the DB529 fund.

Structured interviews

JLARC staff conducted structured interviews with staff from Virginia529 and other Virginia state agencies, staff for related programs in other states, and SOAR Virginia access providers.

Virginia529 and other Virginia state agencies

JLARC staff conducted interviews with Virginia529 staff to receive their input on the implications of removing actuarial surplus funds and how funds could be used to support higher education access and affordability. JLARC staff also sought input from Virginia529 staff on feasible approaches for returning a portion of actuarial surplus funds to Legacy Prepaid529 account holders, and what would be required administratively to return these funds. In addition, JLARC staff interviewed Virginia529 staff responsible for administering the SOAR Virginia scholarship program to better understand how the program works and the data associated with the program.

JLARC staff conducted structured interviews with staff at other Virginia state agencies and authorities to explore possible ways actuarial surplus funds could be used to enhance higher education access. JLARC also conducted interviews to discuss options for determining how to best allocate actuarial surplus funds if they were placed in a long-term endowment or dedicated fund. State entities included:

- the State Council of Higher Education for Virginia (SCHEV);
- the Virginia Community College System; and
- the Tobacco Region Revitalization Commission.

Other states

JLARC staff conducted structured interviews with staff responsible for managing prepaid529 programs and related college savings programs in other states. These states included

- Florida
- Maryland
- Pennsylvania
- Washington

These interviews focused primarily on the extent to which other state prepaid529 programs returned actuarial surplus funds to account holders. JLARC staff also used the interviews to identify any minimum funded statuses used by other states' programs in determining whether surplus funds could be returned to account holders. States were selected for interviews based on the funded status of their prepaid529 program and the size of their actuarial surplus; whether they used a formal "threshold" funded status for determining whether returning surplus funds should be considered; and efforts to return surplus funds to account holders in recent years.

JLARC staff also interviewed staff in Pennsylvania and North Carolina to learn more about their state-subsidized loan programs for college students. The interviews focused on understanding the eligibility criteria for loans, revenue sources to fund the programs, any challenges of implementing or operating a state-subsidized loan program, and any lessons learned for states considering implementing such a program.

Access providers for SOAR Virginia program

JLARC staff conducted interviews with access providers for the SOAR Virginia program. The mentoring and coaching component of the SOAR Virginia program is administered locally in high schools by six regional nonprofit access providers. JLARC staff conducted structured interviews with two of these access providers, GRASP and ACCESS. The purpose of the interviews was to learn more about how the program is administered, the individuals who provide the advising services, the students receiving the services, and the access providers' perspectives on the effectiveness of the program.

Research literature review

JLARC staff conducted a review of academic literature addressing the effectiveness of support services for high school students at risk of not enrolling in or completing a postsecondary program. The literature review was limited to research published in peer-reviewed journals. Much of the available literature focused on the federal GEAR UP program. JLARC staff reviewed a total of 12 research papers on support services, including seven papers focused on GEAR UP.

Data analysis

JLARC staff analyzed data to help estimate the number of students and the magnitude of impact of different options for using actuarial surplus funds to support higher education access and affordability. JLARC staff also used data from the SOAR Virginia program to evaluate the effectiveness of the program.

Analysis of options for enhancing higher education access and affordability

JLARC staff analyzed SCHEV student-level data to examine how actuarial surplus funds from the DB529 fund could be used to provide additional grants to postsecondary students. The data was for the 2020–21 academic year and included student demographic information such as race and expected family contribution; financial aid awarded from state, federal, institutional, and other sources; and amounts of remaining unmet need for tuition and fees and the total cost of attendance.

SOAR Virginia program

JLARC staff analyzed data from the SOAR Virginia program to assess the effectiveness of the program in achieving its primary goal, which is to increase post-secondary enrollment and completion for low-income students. Staff analyzed program enrollment trends, rates for students completing the program and claiming their $2,000 scholarship, rates of enrollment in a postsecondary institution, and rates of earning a post-secondary degree or credential.

Meeting attendance

During the study, JLARC staff regularly attended many Virginia529's board and committee meetings. The meetings most related to this study included those of the Virginia529 board (meets six times annually), the Investment Advisory Committee (meets five times annually), the Audit and Actuarial Committee (meets quarterly), and the Access and Affordability Committee (meets three times annually).

Document reviews

JLARC staff reviewed numerous documents as part of its research. Documents reviewed included

- recent actuarial valuations of the DB529 fund;
- recent actuarial valuations of other states' prepaid529 programs; and
- Virginia529 board and committee meeting materials.

Appendix C: Agency response

As part of an extensive validation process, the state agencies and other entities that are subject to a JLARC assessment are given the opportunity to comment on an exposure draft of the report. JLARC staff sent an exposure draft of this report to Virginia529, the State Council of Higher Education for Virginia, and the secretary of education. Relevant portions of the draft were sent to the Virginia Department of Treasury and the Virginia Community College System.

Appropriate corrections resulting from technical and substantive comments are incorporated in this version of the report. This appendix includes a response letter from Virginia529.

Dream Save Achieve

December 12, 2022

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

VIA EMAIL

Re: JLARC Review of Defined Benefit 529 Surplus Funds

Dear Mr. Greer:

The Virginia College Savings Plan (Virginia529) thanks you for the opportunity to review and comment on the *JLARC Review of Defined Benefit 529 Surplus Funds* (the Report). Virginia529 appreciates the professionalism of the review and the substantial collaboration and sharing of information and ideas between JLARC staff and the Virginia529 staff.

Since its creation in 1994 by the Virginia General Assembly, the primary education mission of Virginia529 is to enhance the accessibility and affordability of higher education for all citizens of the Commonwealth. Virginia529 does that by providing excellent, low-cost education savings programs which make it the largest 529 program in the country. Virginia529 is completely self-funded with no state tax dollars.[1] Virginia529 appreciates that this report recognizes that the valuation and pricing assumptions used by Virginia529 for its Legacy Prepaid529 program are, and have been, reasonable[2] and that all participants have received the contractual benefits outlined in Virginia529's enabling legislation and each Prepaid529 contract. In May 2019 the Legacy Prepaid529 program was closed to new participants and in February 2021 Virginia529 opened the new Tuition Track Portfolio (TTP) within the Invest529 program, providing a more affordable way to access a market-risk free defined tuition benefit program. The two combined defined benefit programs are known as the DB529 Program and their assets are held in the DB529 Fund.[3]

Virginia529's enabling statute in 1994 also established its operating and governance structure which recognizes board members as trustees and fiduciaries of the Plan. Virginia529's statutory design provides broad authority to the Virginia529 Board[4] to develop, implement and administer its education savings programs[5], to ensure those programs are designed to enhance accessibility and affordability to higher

[1] Virginia529 received a small non-interest-bearing Treasury loan to start its education savings program, repaid in 1997, and is now receiving a similar Treasury loan for start-up costs associated with its RetirePath VA program, also to be repaid from program revenues.

[2] The reasonableness of Virginia529 actuarial assumptions has been affirmed in three separate actuarial audits completed by JLARC's independent actuary, GRS, in 2021, 2017 and 2013.

[3] A 2018 JLARC report, *Proposed Change to Payout Model of Virginia's Prepaid529 Program*, supported the decision of Virginia529 to make way for a more affordable and flexible prepaid tuition benefit structure by closing the Legacy Prepaid529 program to new participants. The reasons for the change included lack of flexibility and affordability in purchasing contracts, growing disparity in benefits depending on the institution attended, changes in tuition and fee policies at Virginia public institutions and complexities of the program.

[4] The Virginia529 Board is composed of four *ex officio* state officials and seven citizen members appointed by the Governor and the General Assembly, each with expertise in a variety of relevant areas including finance, accounting, economics, investments, law, and education. **See Attachment 1: Virginia529 Board.**

[5] Virginia529 has additional statutory mandates to develop disability savings programs and an in-development state facilitated retirement program, but those are not germane to this Report.

education, and to take other actions and develop such other access and affordability programs as it deems appropriate and prudent with available resources to meet its statutory mandate.[6]

The Report includes much with which Virginia529 agrees and the Virginia529 Board already has been moving forward on many of the suggestions included in the Report. Virginia529 is aligned with JLARC about the importance of supporting educational access and affordability for all Virginians to improve opportunities for the future success of individuals and the Commonwealth. Virginia529 supports the educational goals and policies of the Commonwealth and routinely acts to support, with available resources, programs and initiatives aimed at enhancing such access and affordability. Virginia529 specifically agrees that regardless how the review of the DB529 Fund evolves, responsibility for the investment and management of the DB529 Fund should remain within the fiduciary control of the Virginia529 Board as it has since program inception (**Recommendation 9**). This conclusion obviates the need for **Recommendations 1 and 2.**

The Report includes specific numbers and recommends specific actions with respect to those numbers relating to the DB529 Fund, even though the numbers are outdated. Recent volatile markets, a weakening global economy and rising inflation have had an impact on the DB529 Fund just in the four months since the last official valuation as of June 30, 2022 and those impacts are ongoing. The global economic outlook for the next 12 to 18 months is challenging according to most economists. Accordingly, the projections and unclouded outlook contained in the Report are not consistent with current economic and market conditions.

This is not to say that the DB529 Fund is not adequately funded or that it is in any jeopardy. Rather, the Virginia529 Board and staff constantly monitor the investments in the DB529 Fund and evolving trends in financial markets and domestic and global economies, along with monitoring higher education costs and enrollment trends. The Virginia529 Board currently is evaluating the funded status of the DB529 Fund including its actuarial funded status and developing a rigorous stress test scenario that replicates experiences in the last twenty years[7] as part of a comprehensive risk management framework.[8] As part of its plan to advance a legislative proposal to specifically authorize the use of any funds in the DB529 Fund for any purpose other than meeting contractual obligations, the Virginia529 Board will complete its intensive risk review.

With the risk analysis ongoing, and taking into account current economic conditions, the Virginia529 Board is considering additional opportunities with respect to the DB529 Fund like those outlined in the Report.[9]

Virginia529 and its Board have been at the forefront of those advancing programs to enhance higher educational access and affordability since program development began in 1994. That is Virginia529's statutory mandate. The statutory mission is met first through the delivery of 529 education savings programs, providing dependable, professionally managed, low-cost savings options which allow families

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[6] VA Code § 23.1-706 provides that "[t]he assets of the Plan shall be preserved, invested and expended solely pursuant to and for the purposes of this chapter and shall not be loaned or otherwise transferred or used by the Commonwealth for any other purpose."

[7] In the relatively short time DB529 prepaid tuition contracts have been offered, the U.S. economy has weathered two substantial recessions and any projections of future experience must consider the potential impacts of other similar economic events.

[8] The Virginia529 Board is working with its actuary to develop a risk-based capital (RBC) approach similar to that used by regulated insurance companies and RBC and stress testing measures used by regulated financial institutions .

[9] See Attachment 2:**Virginia529 Board Resolution adopted October 7, 2022**

and individuals to save for future education goals in tax advantaged programs. As its programs matured, in 2009 the Virginia529 Board sought specific legislative support to expand its access and affordability initiatives. The General Assembly provided unanimous, bipartisan support for that request. Also included in the 2009 legislation requested by Virginia529 was the expansion of its Board to eleven members, adding three appointed by the Virginia House of Delegates and Senate, and codification of its Investment Advisory Committee and Audit and Actuarial Committee, to broaden the depth of expertise on the Virginia529 Board and its committees as the growth and reach of its programs continued.

Virginia529 opened SOAR Virginia in 2010 as a pilot program in a small number of Virginia high schools. Over the last dozen years, the program has grown to provide advising services and scholarship support to more than 6000 students in over 100 high schools (many among the most economically and resource challenged schools in Virginia). Virginia529 appreciates the thorough analysis and review of SOAR Virginia included in the Report and the praise and support provided for the program. The Report states "the statistical analysis of SOAR data suggests that the program substantially increased participants' enrollment in postsecondary institutions." The Report also documents some of the other access and affordability programs supported by Virginia529. Most of those programs are new to Virginia529 and so did not receive the same level of analysis and review in the Report as SOAR Virginia.[10]

Virginia529's commitments to access and affordability initiatives, made possible by the allocation of available administrative fee revenues, are well established and grounded in thorough research and collaboration with state partners including the State Council of Higher Education in Virginia (SCHEV), the Virginia Community College System (VCCS), SOAR Virginia access partners, the Department of Labor's Division of Workforce Development, the Department of Education, and many others.[11] Virginia529 is aligned in its support of the Commonwealth's higher education goals, including those in SCHEV's strategic plan, Pathways to Opportunity. Virginia529 looks forward to continuing its work with these partners and ongoing discussions with them about opportunities to further advance educational access and affordability.

The recent increases in the actuarial funded status of the DB529 Fund are discussed well and at length in the Report. The combination of (i) an extended period of strong markets and generally better than assumed investment performance (**culminating in a 24% investment return for the year ended June 30, 2021 and a single year jump in actuarial funded status of 36%**), (ii) five years of moderating tuition inflation; (iii) a reduction in DB529 Program in liabilities since 2019[12]; and (iv) the allocation of net operating revenues to the DB529 Fund through FY 2019, resulted in an elevated actuarial funded status.

The impact on actuarial funded status of allocating net operating revenues to the DB529 Fund is significant and is part of the answer to why the opportunities discussed in the Report and under consideration by the Virginia529 Board exist. Virginia529 assesses a small administrative fee on assets under management in its Invest529 and CollegeAmerica programs. The administrative fee currently is approximately 0.05% (five basis points or 5/100ths of a percent) based on assets under management. These fees are among the lowest in the country and have been reduced four times in the last six years,

[10] Virginia529 monitors access and affordability performance through metrics and evaluations of each program. Virginia529 is currently hiring an Access Program Director to allocate more internal resources on the development and evaluation of its access and affordability partnerships

[11] See Attachment 3: New Access and Affordability Partnerships.

[12] Because the Legacy Prepaid529 program closed in 2019 and TTP opened in early 2021, no new liabilities were added for two years and growth in the new TTP program is moderate as it is introduced to Virginians.

most recently in January 2022. The program administrative fees provide most of the non-general fund revenues for the operations of Virginia529.[13] As noted in the Report, because Virginia529 is the largest 529 program in the country, even small administrative fees generate substantial revenues which provide opportunities to advance financial and educational success.

In recognition of the DB529 Fund actuarial funded status, the Virginia529 Board has since the close of FY2020 allocated a portion of net revenues to educational access and affordability initiatives as described earlier.[14] The Virginia529 Board hopes that through the work done in the Report and by the Virginia529 Board, the General Assembly in 2023 will support the Board's efforts to allocate resources from operating revenues when and if available as well as a prudent and responsible amount from the DB529 Fund to increased educational access and affordability initiatives.[15]

The Report is premised on a conclusion that the DB529 Fund is, and has been, substantially overfunded, and that the Virginia529 Board has been overly conservative and not moving quickly enough to identify ways to actively reduce the actuarial funded status.[16] The Virginia529 Board follows its statutory, fiduciary mandate and operates within the confines of its fiduciary obligations, statutory structure, and constraints of the biennial budget process for spending authority for its access and affordability initiatives. The Report recommends an additional layer of oversight in the form of an "independent committee" and mechanisms to address work that is being done by the Virginia529 Board. **Recommendations 1 and 2,** which limit the fiduciary discretion of the Virginia529 Board, lack adequate rationale or justification. The Board hopes the foregoing outline of some of the ways in which the Board (i) prudently, appropriately, and conservatively meets its fiduciary obligations to ensure all long-term contractual obligations are met and to protect the Commonwealth and the Plan from undue risk and (ii) seeks ways to support innovative and effective educational access and affordability initiatives across the Commonwealth in partnership with key state partners establishes the commitment of the Virginia529 Board to the same goals as the Commission.

Chapters 3 and 4 of the Report detail a variety of proposals for potential uses of assets of the DB529 Fund. Virginia529 agrees that the two primary concepts included in the Report – to consider whether an opportunity exists to enhance the benefits provided in Legacy Prepaid529 contracts based on positive actuarial experience and whether an opportunity also exists to further enhance educational access and affordability – are the only two types of initiatives authorized under the controlling legislative structure. The Report does not draw conclusions or recommend a specific course of action for either type of program. Virginia529 supports **Policy Option 5** which would leave it to Virginia529 to develop a proposal with respect to current and former Legacy Prepaid529 participants. Virginia529 supports a result that allows Virginia529 to continue working in partnership with SCHEV and other access and affordability partners to develop programs. **(Recommendation 8)** The Access

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[13] Certain other types of administrative fees are assessed for a variety of reasons such as insufficient funds on contributions to accounts. To develop RetirePath VA, Virginia529 receives a noninterest bearing treasury loan to be repaid from RetirePath VA revenues. RetirePath VA loans and related expenditures are accounted for separately from education savings revenues and expenditures.

[14] Most recently, funding for such programs was included in the introduced Budget Bill in December 2021, but were removed without comment (except to advise JLARC staff to review the programs being funded) by the General Assembly in developing the final Budget Bill.

[15] Recent market volatility has impacted the CollegeAmerica and Invest529 portfolios and assets under management have declined and those reductions have a direct impact on administrative fee revenues anticipated in the future.

[16] See **FIG 4** for historical actuarial funded status of the DB529 Fund. A single year, FY2021, with investment performance of almost 24%, resulted in a 36% increase in funded status.

Advisory Committee chartered by Virginia529 in late 2021 can fulfill the role described in the Report for an advisory committee and retain the fiduciary discretion and control of the Board pursuant to the existing statutory structure.

Virginia529 also agrees that important parts of moving forward on either of those proposals will require legislative support. (**Recommendation 3-6) (Policy Options 1-10)** The Virginia529 Board is considering those options now and anticipates a legislative proposal for consideration in the 2023 Session. The Board hopes that such legislation will have the same level of legislative support that the original bill creating the then Virginia Higher Education Tuition Trust Fund received: 100% bipartisan support. Most members of the Assembly signed on as patrons, including some of the members of the current Commission, and Virginia529 will invite you to do the same as we move forward into the next quarter century of tax-advantaged education savings and support for educational access and affordability.

As always, Virginia529 appreciates the thought and effort put into the Report, will continue to carefully consider the options included in the Report, and looks forward to ongoing discussions and collaboration with JLARC staff and other state partners as Virginia529 continues its work to advance educational access and affordability.

Sincerely,

Mary G. Morris
Chief Executive Officer

Attachment 1

Virginia529 Board

Lauren Kent Stack
Board Chair
Independent Trustee, Six Circles Funds
Gubernatorial Appointee Citizen Member
Appointed: Aug, 2019

Hon. Walter A. Stosch
Vice Chair, Audit & Actuarial Committee
Senate Appointee
Citizen Member
Appointed: Apr, 2017

Randall McCabe
State Comptroller, Virginia Department of Accounts
Ex-Officio Member

Catherine Beck
Division of Family Services, Fairfax
Gubernatorial Appointee
Citizen Member
Appointed: Sep, 2020

Dr. Craig Herndon
Vice Chancellor, VCCS
(Designee for Dr. Sharon Morrissey, Interim Chancellor, VCCS)
Ex-Officio Member

Lisa Jennings
Chief Financial Officer, Spirit of Virginia
Gubernatorial Appointee
Citizen Member
Appointed: Jul, 2022

David Richardson
Treasurer of Virginia
Ex-Officio Member

Dante Jackson
Board Vice Chair
President, Atlantic Union Bank
Gubernatorial Appointee
Citizen Member
Appointed: Jul, 2020

Peter A. Blake
Director, State Council of Higher Education
Ex-Officio Member

Dr. Elliott J. Dubin
Policy Research Director (ret), Multi-State Tax Commission
Gubernatorial Appointee
Citizen Member
Appointed: Jul, 2021

Reggie Samuel
Partner, Leumas Group
Gubernatorial Appointee
Citizen Member
Appointed: Aug, 2015

Mary G. Morris
CEO, Virginia529

Attachment 2

Board of the
Virginia College Savings Plan
Resolution adopted
October 7, 2022

WHEREAS, the Virginia College Savings Plan (then named the Virginia Higher Education Tuition Trust Fund) (Virginia529) was created by an act of the General Assembly of Virginia in 1994 to "enhance the accessibility and affordability of higher education for all citizens of the Commonwealth;" and,

WHEREAS, in carrying out its duties and responsibilities, members of the Virginia529 Board "shall act as trustee and shall exercise the judgment of care under the circumstances then prevailing that persons of prudence, discretion and intelligence exercise in the management of their own affairs;" and,

WHEREAS, the assets of Virginia529 "shall be preserved, invested, and expended solely pursuant to and for the purposes of [its enabling legislation] and shall not be loaned or otherwise transferred or used by the Commonwealth for any other purpose;" and,

WHEREAS, in the twenty-eight years since its founding Virginia529 has developed and administered prepaid tuition and education savings programs that have assisted millions of individuals and families across Virginia and the country to plan and save for their education savings goals, becoming the largest 529 program in the country in the process; and,

WHEREAS, in FY2009/2010 the Board of Virginia529 determined that because of its growth and success in helping Virginia families save for higher education costs, an opportunity existed to expand efforts to meet its statutory mandate to enhance access and affordability of higher education for all citizens of the Commonwealth through an early commitment scholarship program, SOAR Virginia, to reach underserved, low income students across Virginia in the most under-resourced high schools in Virginia; and,

WHEREAS, from 2018 to 2020, the Board of Virginia529 resolved to explore additional opportunities to advance access and affordability to higher education and allocate available operating revenues to a variety of programs focused on advising and mentoring of secondary students in Virginia, support for workforce development initiatives aimed at making Virginia the best educated state in the country and allocating scholarship funds in targeted initiatives, ultimately supporting seven programs in partnership with state and nonprofit partners including the State Council for Higher Education in Virginia (SCHEV), the Virginia Community College System and the Virginia Foundation for Community College Education; and,

WHEREAS, commencing in 2015 and continuing through 2019, the Board of Virginia529 evaluated the legacy prepaid tuition contract program (Prepaid529) that was the original foundation of the Plan and gathered legislative support for a revised defined benefit tuition program designed to be more affordable, flexible, and simple for families to save for higher education in a market risk free portfolio, known as the Tuition Track Portfolio within the Invest529 program (collectively, the Defined Benefit 529 Program or DB529); and, NOW, THEREFORE, BE IT RESOLVED by the Board of Virginia529 that (i) we hereby affirm and acknowledge our fiduciary responsibilities as trustees of the assets and programs of Virginia529 to ensure that the Plan is sufficiently funded to meet all future contractual obligations; (ii) our fiduciary obligations demand that we consider an enhanced risk framework based on best practices to include the actuarial valuation of the DB529 Fund, an appropriate capital reserve for the Fund, and stress testing of the Fund after which the Virginia529 Board may consider the appropriateness of allocating resources from the DB529 Fund to further support the statutory mission of Virginia529 to enhance access and affordability of higher education for the citizens of Virginia.

BE IT FURTHER RESOLVED that as the Virginia529 Board completes its fiscal and risk review, it shall also continue its work to further educational access and affordability by working with state partners to identify opportunities to make access to education more equitable and more affordable for all Virginians and commit to seeking transformative change in educational access in Virginia.

____

Chair, Board of the Virginia College Savings Plan

Attachment 3

Soaring to New Horizons:
Increasing Education Access and Affordability from a Solid Foundation

Our Mission to Enhance Access and Affordability for All Virginians

- Virginia529's statutory mission is "[t]o enhance the accessibility and affordability of higher education for all citizens of the Commonwealth," and Virginia529's Board is empowered to develop and implement scholarship or matching grant programs to achieve this mission.
- Building on the success of the SOAR Virginia scholarship program, in 2021 the Virginia529 Board approved an expanded access and affordability (A&A) initiative, to be funded from net operating revenues, focusing on three pillars which aligned more broadly with the priorities of the administration and the legislature: **mentoring and coaching, workforce development, and scholarships and grants.**

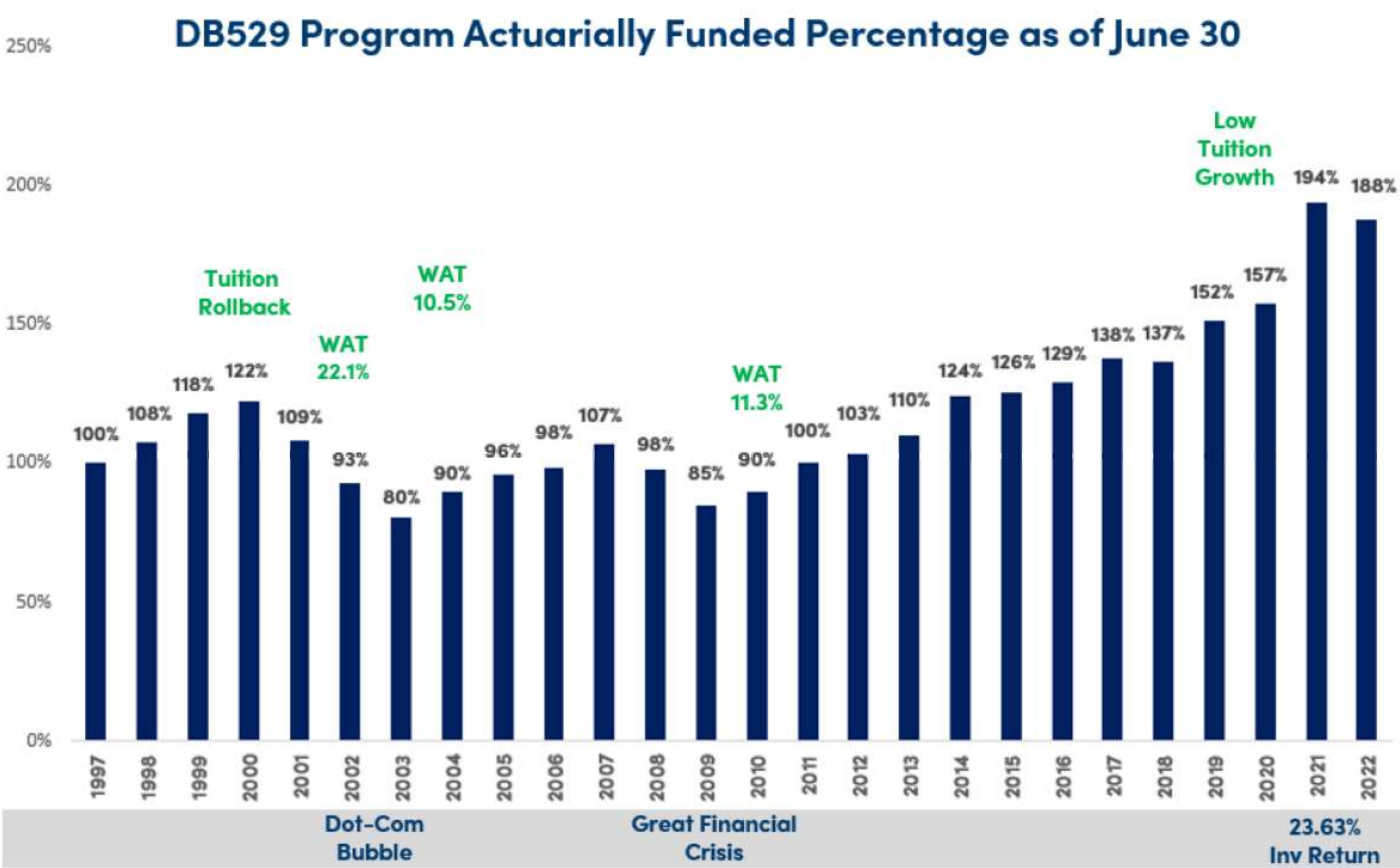
Leveraging Existing Programs to Enhance Statewide Impact

- Virginia529's Board approved funding for program partners with track records of success in helping students achieve their education goals.
- **The expanded A&A initiative represents a historic investment by Virginia529 to help more students across a broader socio-economic scale,** demonstrating the Board's commitment to helping all Virginians dream, save, and achieve.
- As approved, funding was spread across all three focus areas, which some programs serving more than one priority:

A Three-Year Funding Commitment to Ensure Sustained Success

- To provide the best option for sustainment, the Virginia529 approved a three-year holistic funding plan tailored to meet the individual needs of each program, with a total commitment of just over $13 million in partnership funding over three years.
- **By funding existing programs with track records of success, Virginia529's A&A expansion will help reach even more students across the Commonwealth to provide support to meet students and their families where they are.**

Attachment 4



Virginia529

Funded Status vs. Actuarial Probability

- The impact of removing $1.3 billion from the fiscal 2022 asset levels would reduce the actuarial funded status to 110% and an actuarial probability of meeting all future obligations by 27% to 72%
- Under fiscal 2022 assumptions and economic conditions, a 125% funded status provides a 90% actuarial probability of meeting all future obligations
- The actuarial probability of meeting obligations is not a static relationship to the funded status as shown on next slide

	Actuarially Funded Percentage	Probability of Meeting Obligations
	80%	6%
	90%	24%
	100%	50%
Removal of $1.3B	110%	72%
	120%	86%
125% Funded	125%	90%
	130%	94%
	140%	98%
	150%	99%
	160%	99%
6/30/2022	187.5%	99%

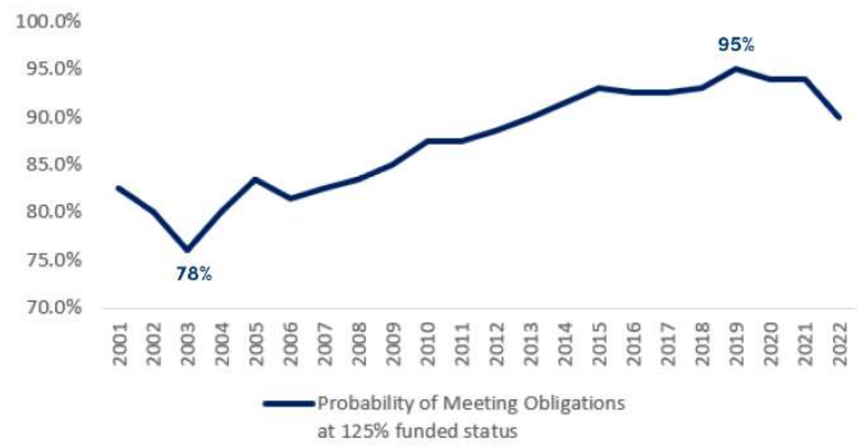
*Data compiled from actuarial valuation reports by VA529's actuary

Virginia529

Attachment 4

Probability of meeting obligations at a funded status of 125%

- **The probability of meeting obligations is not a static relationship to the funded status**
- **The probability of meeting obligations can change even when the funded status does not change based on several factors including:**
  - **Inflation**
  - **Investment return assumptions**
  - **Asset allocation**
  - **College tuition assumptions**



*Data compiled from actuarial valuation reports by VA529's actuary

Virginia529

Attachment 4

Actuarial Disclaimer on Unpredictability of Future Events

"It is important to remember that actuarial calculations are based on assumptions regarding future events. Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law"

-GRS

Virginia529

Appendix D: Estimated actuarial surplus funds needed to subsidize TTP

JLARC's independent actuarial consultant, GRS, assessed the funded status of the Tuition Track Portfolio (TTP) program to determine the estimated amount of surplus funds in the Defined Benefit 529 (DB529) fund needed to maintain TTP's funded status at 125 percent or higher. TTP's funded status declines without an annual subsidy because the price of a TTP unit does not account for the full cost of operating the program.

Without an annual subsidy from DB529 surplus funds, the funded status of TTP is projected to gradually decline to slightly less than 87 percent in FY44 (Table D-1). This funded status equates to a probability of less than 20 percent that the program will have sufficient assets to meet its obligations to TTP participants. This projection is based on an assumption that 450,000 TTP units will be sold annually. The number 450,000 was used because it is the approximate midpoint between the annualized number of TTP units that had been sold through March 2022 and the annual number of units sold if TTP sales matched Legacy Prepaid529 sales. Virginia529 staff indicated that it is unknown how many TTP units will be sold in the future.

The amount of DB529 surplus funds needed to keep TTP at a funded status of 125 percent depends on the investment return assumption of the DB529 fund (Table D-2). Under an assumed investment return of 5.5 percent, a total of $335 million in surplus funds (adjusted for inflation) is estimated to be needed to maintain a 125 percent funded status through FY44. The total subsidy is estimated to increase to $650 million (adjusted for inflation) under a lower investment return of 3.5 percent. The total amount of surplus funds needed to subsidize TTP increases under lower investment returns because there is less investment earnings to offset the less-than-full-cost price of TTP units. The amount of the subsidy will also change if the number of units sold annually differs from 450,000. If more units are sold, a larger subsidy would be needed; if fewer units are sold, a smaller subsidy would be needed.

TABLE D-1
Funded status of TTP is projected to decline without annual subsidy from DB529 fund

Fiscal year	Total assets ($M)	Total obligations ($M)	Unfunded liabilities/(surplus) ($M)	Funded ratio
2022	$93.6	$102.2	$8.6	91.6%
2023	165.1	178.4	13.3	92.6%
2024	242.9	262.7	19.7	92.5%
2025	328.5	355.4	26.9	92.4%
2026	421.8	456.6	34.8	92.4%
2027	521.4	565.0	43.5	92.3%
2028	626.1	679.2	53.1	92.2%
2029	734.6	798.3	63.7	92.0%
2030	846.1	921.4	75.2	91.8%
2031	960.4	1,048.3	87.9	91.6%
2032	1,076.9	1,178.6	101.8	91.4%
2033	1,195.5	1,312.4	116.9	91.1%
2034	1,316.2	1,449.6	133.4	90.8%
2035	1,438.7	1,590.2	151.5	90.5%
2036	1,562.6	1,733.8	171.1	90.1%
2037	1,687.8	1,880.3	192.5	89.8%
2038	1,814.1	2,029.9	215.8	89.4%
2039	1,940.9	2,182.0	241.1	89.0%
2040	2,067.3	2,335.8	268.6	88.5%
2041	2,192.6	2,491.0	298.4	88.0%
2042	2,318.1	2,648.8	330.7	87.5%
2043	2,445.4	2,811.2	365.8	87.0%
2044	2,577.3	2,981.0	403.7	86.5%

SOURCE: JLARC analysis of modeling by GRS.
NOTE: Assumes (i) a 5.5 percent annual investment return, (ii) 450,000 TTP units are sold annually, (iii) tuition increases 4 percent in each of FY22 and FY23 and 6 percent annually thereafter, and (iv) a discount rate of 5.5 percent.

TABLE D-2
Larger subsidy for TTP is needed under lower investment return assumptions

	Annual subsidy from DB529 surplus (millions)		
Fiscal year	*5.5% investment return*	*4.5% investment return*	*3.5% investment return*
2022	$34.2	$34.2	$34.2
2023	21.8	23.4	25.0
2024	24.4	26.9	29.5
2025	25.7	29.3	32.9
2026	26.8	31.6	36.4
2027	27.6	33.7	39.7
2028	28.0	35.4	42.8
2029	28.0	36.8	45.6
2030	27.9	38.1	48.4
2031	27.6	39.3	51.1
2032	27.2	40.5	53.8
2033	26.8	41.7	56.5
2034	26.4	42.9	59.4
2035	25.9	44.1	62.2
2036	25.4	45.2	65.1
2037	24.8	46.4	68.0
2038	24.2	47.6	71.0
2039	23.5	48.7	73.9
2040	22.7	49.7	76.7
2041	21.7	50.5	79.4
2042	21.1	51.8	82.5
2043	21.0	53.6	86.3
2044	21.6	56.2	90.8
Total subsidy [a]	**$335.0**	**$493.0**	**$650.0**

SOURCE: JLARC analysis of modeling by GRS.
NOTE: Assumes (i) 450,000 TTP units are sold annually, (ii) tuition increases 4 percent annually in FY22 and FY23 and 6 percent annually thereafter, and (iii) a discount rate of 5.5 percent.
[a] Total subsidy shown in its present value. Therefore, annual subsidies do not sum to this total.

Appendix E: DB529 estimated funded status under surplus removal scenarios based on 2021 valuation

JLARC's independent actuarial consultant, GRS, conducted modeling based on the 2021 valuation to project the funded status of the Legacy Prepaid529 program under different actuarial surplus fund removal scenarios using different investment return and tuition increase assumptions. Removing $1.3 billion in surplus funds under current Virginia529 assumptions (5.5 percent investment return and 6 percent long-term tuition growth) reduces the funded status of the Legacy Prepaid529 program to a low of just over 130 percent in the final year that surplus funds are removed (Table E-1).

Removing actuarial surplus funds under more conservative assumptions has a much more modest impact on the Legacy Prepaid529 program's funded status. Under moderately conservative assumptions (4.5 percent investment return and 7 percent long-term tuition growth), the funded status declines only to a low of 160 percent in the final year that surplus funds are removed (Table E-2). Under more conservative, less likely assumptions (3.5 percent investment return and 7 percent long-term tuition growth), the Legacy Prepaid529 program's funded status declines only slightly to a low of 189 percent in the second year that surplus funds are removed (Table E-3). For withdrawal scenarios using moderately conservative and more conservative assumptions, the DB529 fund would retain a 99 percent probability of having sufficient assets to meet all liabilities through FY44.

Under each of the surplus removal scenarios modeled by the actuarial consultant, the funded status of the Legacy Prepaid529 program is projected to remain above 125 percent. This occurs because a certain amount of funds must remain in the DB529 fund to provide an annual subsidy for the Tuition Track Portfolio (TTP) program. (The TTP program is currently structured to receive a subsidy from the DB529 fund, and this study did not change that assumption.) Under each scenario, the funded status is also projected to initially decline as actuarial surplus funds are removed, then resume increasing until all remaining Legacy Prepaid529 benefit obligations are paid in FY44. When surplus funds are removed under Virginia529's current assumptions or moderately conservative assumptions, the funded status of the Legacy program begins increasing after the last scheduled withdrawal of surplus funds in FY26. This occurs because no additional surplus funds are removed and benefit payments to account holders continue declining as the Legacy Prepaid529 program winds down. Under more conservative, less likely assumptions, the funded status resumes increasing before all scheduled surplus funds are removed. This occurs because a relatively small amount of surplus funds is removed each year ($102 million) and, with a relatively low investment return of 3.5 percent, a substantial amount of surplus funds must remain in the DB529 fund to subsidize TTP.

Volatility in rates of return will change the funded status from the projections in Tables E-1 through E-3 in a given year. Lower or higher rates of return in early years would have a more substantial impact on funded status than lower or higher rates of return in later years, because there is more money in the fund in the early years. However, volatility in rates of return would not significantly impact the overall findings in Tables E-1 through E-3.

TABLE E-1
Projected funded status of Legacy Prepaid529 program for surplus fund removal under current Virginia529 assumptions (millions)
(5.5% long-term investment return and 6% long-term tuition increase)

Fiscal year	Surplus funds removed	Benefit payments [a]	Investment income [b]	Total assets	Total obligations	Unfunded Liabilities/(Surplus)	Funded ratio
2022	$256.2	$287.4	($60.0)	$2,686.2	$1,468.5	($1,217.7)	182.9%
2023	256.2	221.6	133.9	2,321.5	1,314.9	(1,006.6)	176.6%
2024	256.2	206.4	115.4	1,950.5	1,169.1	(781.4)	166.8%
2025	256.2	199.4	96.1	1,565.3	1,022.8	(542.5)	153.0%
2026	256.2	169.0	76.8	1,190.1	900.8	(289.3)	132.1%
2027	0.0	156.8	57.2	1,062.7	785.1	(277.6)	135.4%
2028	0.0	145.6	51.1	939.8	674.9	(264.9)	139.2%
2029	0.0	129.5	45.3	827.1	575.7	(251.4)	143.7%
2030	0.0	116.4	40.0	722.2	484.9	(237.4)	149.0%
2031	0.0	103.6	34.9	625.4	402.5	(222.9)	155.4%
2032	0.0	91.0	30.3	537.0	329.0	(207.9)	163.2%
2033	0.0	78.3	26.1	457.4	264.8	(192.6)	172.7%
2034	0.0	66.4	22.3	386.4	209.6	(176.8)	184.3%
2035	0.0	57.2	18.8	321.7	161.1	(160.6)	199.7%
2036	0.0	50.8	15.6	260.8	116.7	(144.1)	223.5%
2037	0.0	42.2	12.6	206.1	78.8	(127.2)	261.4%
2038	0.0	33.3	10.0	158.3	48.3	(110.0)	327.8%
2039	0.0	23.6	7.7	118.8	26.3	(92.5)	451.9%
2040	0.0	14.5	5.9	87.5	12.5	(75.0)	697.4%
2041	0.0	7.8	4.5	62.5	5.1	(57.4)	1,221.0%
2042	0.0	3.5	3.3	41.1	1.8	(39.4)	2,343.9%
2043	0.0	1.4	2.2	20.9	0.4	(20.5)	5,298.4%
2044	0.0	0.4	1.1	0.0	0.0	0.0	NA
Total	***$1,281***						

SOURCE: JLARC analysis of modeling by GRS based on the 2021 valuation.
NOTE: Assumes (i) a -2 percent annual investment return in FY22 and a 5.5 percent return annually thereafter, (ii) a tuition increase of 4 percent annually in 2022–23 and 2023–24 and 6 percent annually thereafter, (iii) a discount rate of 5.5 percent, and (iv) an annual TTP subsidy based on a 5.5 percent investment return and 450,000 TTP units sold annually.
[a] In addition to benefit payments, the other components of total obligations are the present value of future benefit payments, administrative expenses, and annual TTP subsidies.
[b] In addition to investment income, the other components of total assets are the present value of future installment payments and the market value of assets.

TABLE E-2
Projected funded status of Legacy Prepaid529 program for surplus fund removal under moderately conservative assumptions (millions)
(4.5% long-term investment return and 7% long-term tuition increase)

Fiscal year	Surplus funds removed	Benefit payments [a]	Investment income [b]	Total assets	Total obligations	Unfunded Liabilities/(Surplus)	Funded ratio
2022	$181.0	$287.4	($60.0)	$2,761.4	$1,503.5	$(1,257.8)	183.7%
2023	181.0	221.7	112.9	2,449.3	1,351.8	(1,097.5)	181.2%
2024	181.0	206.5	100.1	2,135.6	1,207.9	(927.7)	176.8%
2025	181.0	200.7	86.9	1,811.5	1,062.4	(749.1)	170.5%
2026	181.0	171.2	73.8	1,501.5	940.3	(561.3)	159.7%
2027	0.0	159.8	60.7	1,368.6	823.6	(545.0)	166.2%
2028	0.0	149.3	55.4	1,239.0	711.7	(527.2)	174.1%
2029	0.0	133.6	50.4	1,118.4	610.2	(508.2)	183.3%
2030	0.0	120.8	45.6	1,004.5	516.7	(487.9)	194.4%
2031	0.0	108.2	41.1	897.5	431.3	(466.2)	208.1%
2032	0.0	95.7	36.9	797.7	354.5	(443.2)	225.0%
2033	0.0	82.8	32.9	705.5	287.0	(418.6)	245.9%
2034	0.0	70.7	29.3	620.7	228.5	(392.2)	271.6%
2035	0.0	61.6	25.8	540.5	176.5	(364.0)	306.2%
2036	0.0	55.1	22.4	462.2	128.5	(333.8)	359.9%
2037	0.0	46.1	19.2	388.7	87.3	(301.5)	445.5%
2038	0.0	36.6	16.3	320.6	53.8	(266.9)	596.4%
2039	0.0	26.1	13.5	259.2	29.4	(229.8)	880.9%
2040	0.0	16.2	11.1	204.4	14.1	(190.3)	1,447.0%
2041	0.0	8.7	8.9	154.0	5.8	(148.2)	2,657.6%
2042	0.0	4.0	6.8	105.0	2.0	(103.0)	5,253.5%
2043	0.0	1.6	4.7	54.5	0.5	(54.0)	12,054.6%
2044	0.0	0.5	2.4	0.2	0.0	(0.2)	NA
Total	***$905***						

SOURCE: JLARC analysis of modeling by GRS based on the 2021 valuation.
NOTE: Assumes (i) a -2 percent annual investment return in FY22 and a 4.5 percent return annually thereafter, (ii) a tuition increase of 4 percent annually in 2022-23 and 2023-24 and 7 percent annually thereafter, (iii) a discount rate of 5.5 percent, and (iv) an annual TTP subsidy based on a 4.5 percent investment return and 450,000 TTP units sold annually.
[a] In addition to benefit payments, the other components of total obligations are the present value of future benefit payments, administrative expenses, and annual TTP subsidies.
[b] In addition to investment income, the other components of total assets are the present value of future installment payments and the market value of assets.

TABLE E-3
Projected funded status of Legacy Prepaid529 program for surplus fund removal under more conservative assumptions (millions)
(3.5% long-term investment return and 7% long-term tuition increase)

Fiscal year	Surplus funds removed	Benefit payments [a]	Investment income [b]	Total assets	Total obligations	Unfunded Liabilities/(Surplus)	Funded ratio
2022	$101.6	$287.4	($60.0)	$2,840.8	$1,503.5	($1,337.2)	188.9%
2023	101.6	221.7	90.6	2,584.2	1,351.8	(1,232.4)	191.2%
2024	101.6	206.5	82.6	2,329.8	1,207.9	(1,121.9)	192.9%
2025	101.6	200.7	74.4	2,069.0	1,062.4	(1,006.6)	194.7%
2026	101.6	171.2	66.4	1,826.2	940.3	(885.9)	194.2%
2027	0.0	159.8	58.6	1,685.0	823.6	(861.5)	204.6%
2028	0.0	149.3	54.2	1,546.8	711.7	(835.1)	217.3%
2029	0.0	133.6	50.0	1,417.0	610.2	(806.8)	232.2%
2030	0.0	120.8	45.9	1,293.2	516.7	(776.5)	250.3%
2031	0.0	108.2	42.1	1,175.4	431.3	(744.1)	272.5%
2032	0.0	95.7	38.4	1,063.8	354.5	(709.3)	300.1%
2033	0.0	82.8	34.9	958.7	287.0	(671.8)	334.1%
2034	0.0	70.7	31.6	859.8	228.5	(631.3)	376.2%
2035	0.0	61.6	28.4	764.0	176.5	(587.5)	432.9%
2036	0.0	55.1	25.3	668.7	128.5	(540.3)	520.6%
2037	0.0	46.1	22.2	576.6	87.3	(489.3)	660.8%
2038	0.0	36.6	19.2	488.0	53.8	(434.3)	907.8%
2039	0.0	26.1	16.4	404.3	29.4	(374.9)	1,374.0%
2040	0.0	16.2	13.7	325.1	14.1	(311.0)	2,301.5%
2041	0.0	8.7	11.2	248.2	5.8	(242.4)	4,281.3%
2042	0.0	4.0	8.6	170.2	2.0	(168.2)	8,513.8%
2043	0.0	1.6	5.9	88.3	0.5	(87.9)	19,537.6%
2044	0.0	0.5	3.1	0.1	0.0	(0.1)	NA
Total	***$508***						

SOURCE: JLARC analysis of modeling by GRS based on 2021 valuation.
NOTE: Assumes (i) a -2 percent annual investment return in FY22 and a 3.5 percent return annually thereafter, (ii) a tuition increase of 4 percent annually in 2022–23 and 2023–24 and 7 percent annually thereafter, (iii) a discount rate of 5.5 percent, and (iv) an annual TTP subsidy based on a 3.5 percent investment return and 450,000 TTP units sold annually.
[a] In addition to benefit payments, the other components of total obligations are the present value of future benefit payments, administrative expenses, and annual TTP subsidies.
[b] In addition to investment income, the other components of total assets are the present value of future installment payments and the market value of assets.

Appendix F: DB529 liquidity under surplus removal scenarios

The liquidity of investment assets is determined largely by the ability to sell the assets without incurring substantial losses. According to JLARC's independent investment consultant, Callan, public equity, investment-grade fixed income, and some multi-asset credit assets are the most liquid assets in the Defined Benefit 529 (DB529) fund because there are no penalties for selling them under normal market conditions (Table F-1). Private credit, private equity, and real estate are the least liquid assets because they would be subject to an estimated 10–25 percent penalty if sold in a normal market. Under stressed market conditions such as a significant market downturn, selling private equity, real estate, and all multi-asset credit assets would be subject to substantial penalties.

TABLE F-1
Estimated penalties for selling DB529 assets in normal and stressed markets

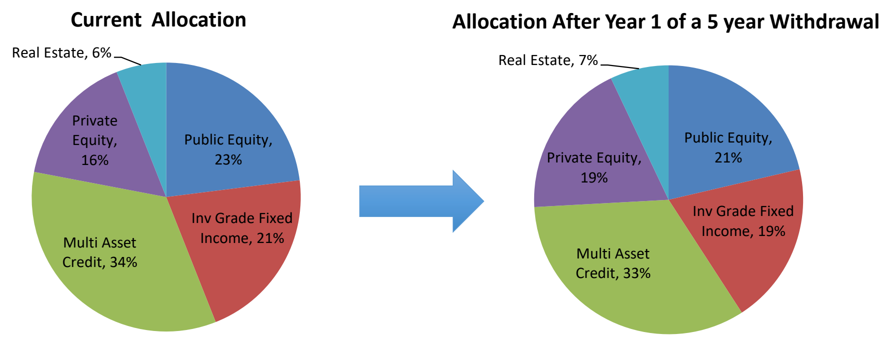
DB529 asset class	Normal market	Stressed market [b]
Public equity	None	Lower market value
Investment grade fixed income	None	Minimal
Other multi-asset credit [b]	None	10% – 25%
Private credit	10% – 15%	25% – 35%
Private equity	15% – 25%	40% – 60%
Real estate	15% – 25%	40% – 60%

SOURCE: Callan.
[a] Excludes private credit assets. [b] Stressed market conditions are similar to conditions during the Great Financial Crisis of 2008.

Removing $1.3 billion in actuarial surplus funds incrementally over five years is projected to cause a moderate level of distortion to the DB529 fund's asset allocation (Figure F-1). After the first year of a five-year withdrawal, the percentages of the fund in liquid assets such as public equity and investment-grade fixed income are projected to decline only slightly. Similarly, the percentages of the fund in less liquid private equity and real estate assets are projected to increase modestly. As a result, the DB529 fund is projected to experience only a slight reduction in the amount and percentage of liquid assets compared with the current allocation (Table F-2).

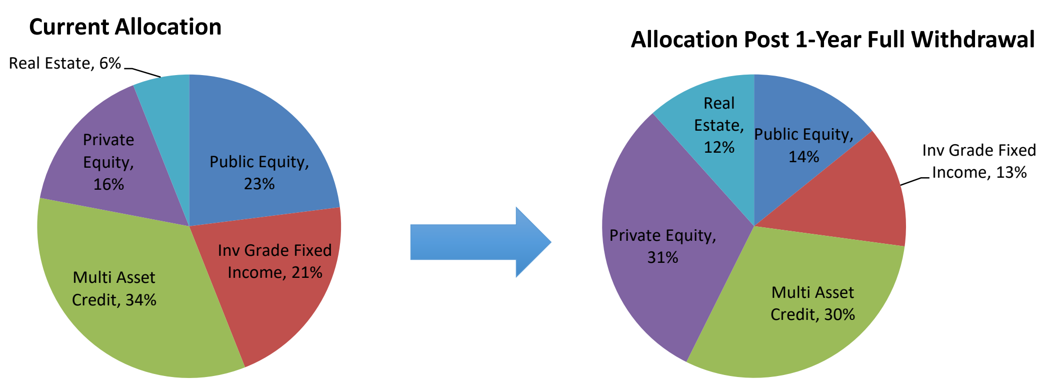
Removing $1.3 billion in actuarial surplus funds in a single year is projected to cause significant distortion to the DB529 fund's asset allocation and is not advised, according to JLARC's independent investment consultant (Figure F-2). The percentage of fund assets in public equity is projected to decline from 23 percent to 14 percent, and the percentage in investment grade fixed income is projected to decline from 21 percent to 13 percent. Importantly the percentage of fund assets in illiquid form is projected to increase substantially, leaving less than half of the fund in liquid assets (Table F-2).

FIGURE F-1
Removing $1.3 billion in surplus funds over 5 years is projected to cause a moderate level of asset allocation distortion to the DB529 fund



SOURCE: JLARC analysis of investment modeling by Callan.
NOTE: Assumes $256 million in surplus funds is removed in the first year under normal market conditions.

FIGURE F-2
Removing $1.3 billion in surplus funds in 1 year is projected to cause an extremely high level of asset allocation distortion to the DB529 fund



SOURCE: JLARC analysis of investment modeling by Callan.
Note: Assumes surplus funds are removed under normal market conditions.

TABLE F-2
Effects on DB529 fund liquidity of removing $1.3 billion in actuarial surplus funds over 5 years versus 1 year

Withdrawal scenario	Liquid assets ($B)	Total assets ($B)	Liquidity level	Estimated liability ($B)	Liquid assets as % of liability	Years of benefit payments [a]
Current allocation	$2.18	$3.06	71%	$1.51	144%	>20
$1.3B over 5 years	1.81	2.76	66%	1.34	135%	>20
$1.3B over 1 year	0.73	1.71	43%	1.34	54%	4

SOURCE: JLARC analysis of investment modeling by Callan.
[a] Estimated years of benefit payments that can be made from liquid assets in the DB529 fund.

Appendix G: Impacts of SOAR Virginia on postsecondary enrollment

Virginia529 administers and funds the SOAR Virginia program, which is intended to increase post-secondary enrollment and completion for low-income high school students in Virginia. The primary goals of SOAR are to provide quality mentoring and coaching to students in underrepresented, high-need areas in Virginia, and to provide a scholarship that incentivizes students to fully participate in the program and help offset the cost of higher education. SOAR began as a pilot program in 2010 and is the largest college affordability effort funded by Virginia529, awarding more than $11 million in scholarships to over 9,000 students since its inception. The program is currently provided in about 130 high schools in Virginia.

Virginia529 partners with six nonprofit organizations that provide college advising and mentoring to participating high school students starting in grade 10, continuing through high school graduation. Students receive advising on academic preparation for post-secondary education, financial literacy training, other support and mentoring, assistance completing college applications, and help obtaining financial aid and completing a Free Application for Federal Student Aid (FAFSA) from their SOAR advisor. Students who remain in the program for all three years receive $2,000 in scholarship funds, which are deposited in a Virginia529 Invest529 account.

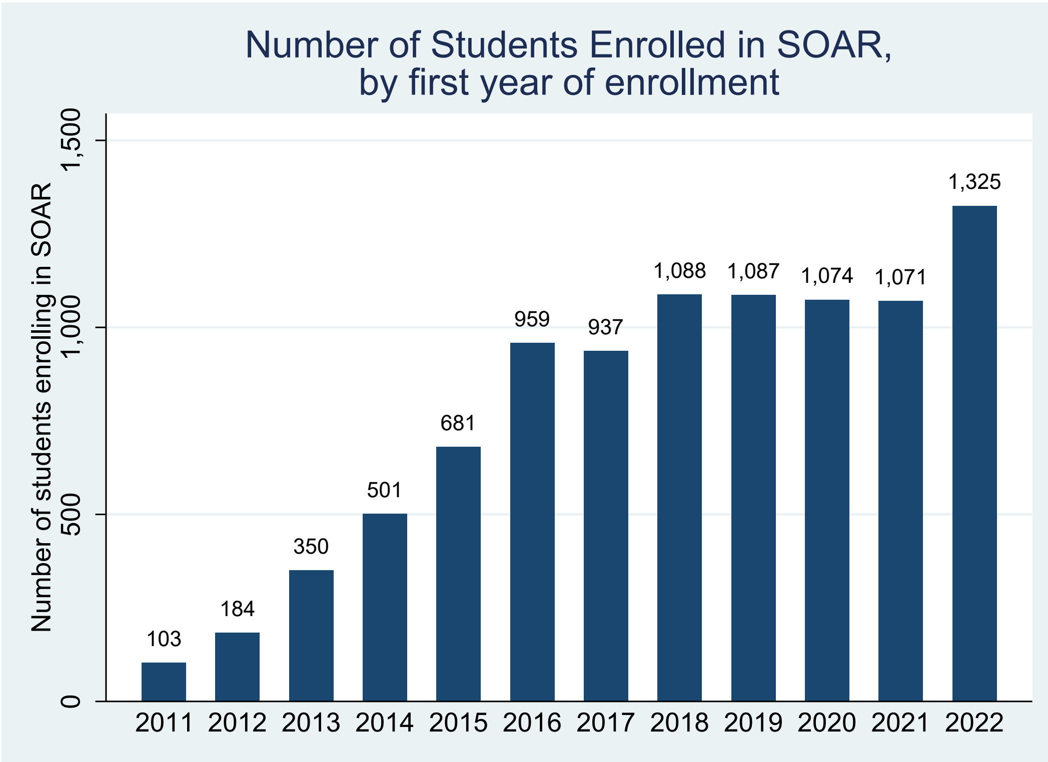
To be eligible for the program, students must be Virginia residents, enrolled in a participating high school, have a minimum cumulative GPA of 2.5 or higher, and qualify for the federal National School Lunch program (an indicator of low income). To remain in the program, students must maintain a 2.5 GPA, meet regularly with their SOAR advisor, attend school regularly, participate in community service, complete a FAFSA during their senior year, and apply to a postsecondary institution.

Virginia529 provides modest administrative funding to the six nonprofit organizations that employ SOAR advisors. SOAR advisors are assigned to a specific high school and typically serve no more than 15 participating students per grade, and no more than 45 students in total. Advisors are often former school counselors and teachers and are typically paid by their organization, not volunteers. Advisors receive a substantial amount of initial and ongoing training for the SOAR program. Advisors meet with students in their high school, both one-on-one and in groups. SOAR is similar in design to early commitment scholarship programs in other states and shares some features of the federal GEAR UP program.

Enrollment in SOAR has grown over time

Since 2011, 9,360 high school students have enrolled in SOAR (as of May 2022). New enrollment grew quickly from 2011 to 2016, then leveled off to about 1,000 new enrollees per year (Figure G-1). About 60 percent of enrollees joined since 2018, including an all-time high of more than 1,300 students joining in 2022.

FIGURE G-1
New SOAR enrollment has increased to more than 1,000 students per year



SOURCE: JLARC analysis of SOAR program data.

Three of the six college access provider organizations serve about 85 percent of the students enrolled in SOAR. Great Aspirations Scholarship Program (GRASP) was the initial partner and has enrolled the most participants, accounting for about 40 percent of all students enrolled in SOAR to date. The second- and third-largest providers are the Virginia Community College System (VCCS) and ACCESS College Foundation.

Two-thirds of participants are female. Approximately 60 percent are students of color, including about 40 percent Black, although data on race and ethnicity is available only starting in 2021. About one-third are first-generation college students. More than one-third of participants are from the Tidewater region, about 15 percent from Central Virginia, and 10 percent from the Shenandoah Valley.

SOAR completion rates are high

Two-thirds of participating students complete all three years of the SOAR program (Table G-1). This completion rate is high for a relatively long program, compared with many education and training programs for disadvantaged youth. The high completion rates may be an indication of program efficacy, and students' strong relationships with their SOAR advisor. About one-fourth of enrollees participate in SOAR for only one or two years, because they enroll as juniors, or do not meet requirements for some years, or withdraw from the program (for example, because they move to a nonparticipating school). Another 6 percent of students who submit a SOAR enrollment form do not meet the requirements and do not complete any years.

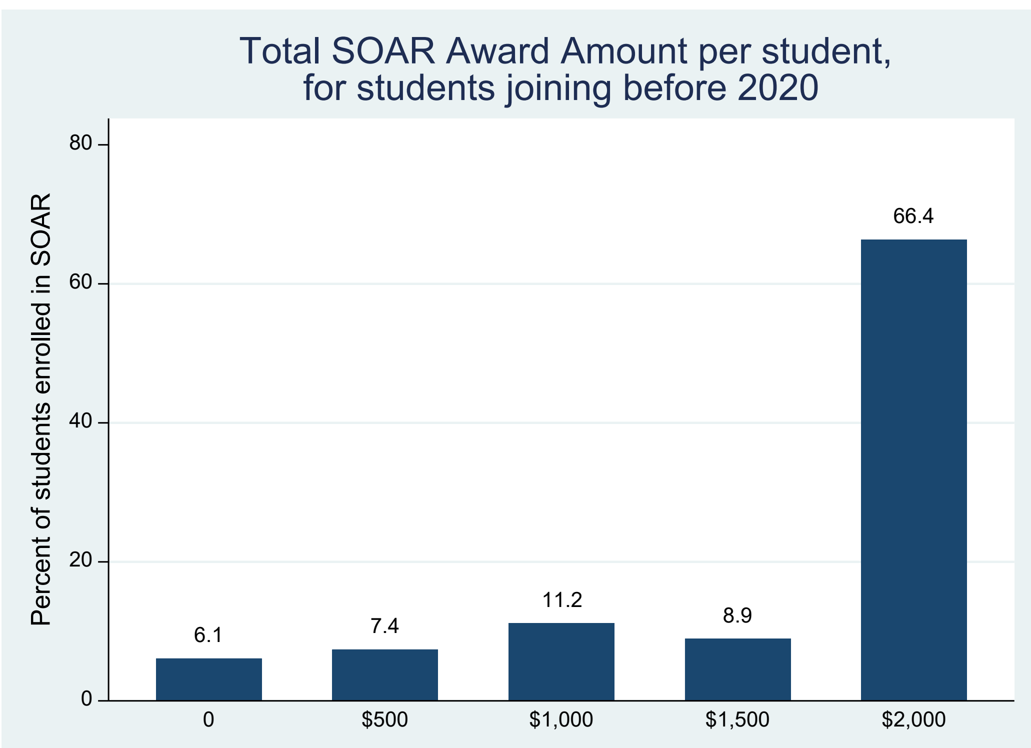
TABLE G-1
Two-thirds of students enroll in SOAR for the full three years

Number of years students met requirements	Number of students	Percent of students
0	355	6.0%
1	644	10.9
2	961	16.3
3	3,888	66.0
4	42	0.7
Total	***5,890***	***100.0***

SOURCE: JLARC analysis of SOAR student data from Virginia 529.
NOTE: Analysis includes students who enrolled before 2020, to allow for time to complete the program.

Consistent with the fact that two-thirds of SOAR students complete the program, two-thirds of students received the maximum total award amount of $2,000 (Figure G-2). The total amount of Invest529 account awards to students who joined before 2020 was $9.5 million, with an additional $1.5 million awarded as of May 2022.

FIGURE G-2
Two-thirds of SOAR participants have earned the full $2,000 scholarship



SOURCE: JLARC analysis of SOAR program data.

Many participants do not use their $2,000 scholarship

For SOAR students who graduated from high school at least five years ago, only about half of their SOAR award amounts have been disbursed to date (Table G-2). Further, of about 1,700 students who enrolled in SOAR before 2016 and have received an award, almost half (47 percent) have not yet received **any** distribution. Some of these students have not enrolled in a postsecondary institution, but a substantial portion of students who did enroll in postsecondary education also have not used their scholarship funds. Of about 1,300 students **who enrolled in a postsecondary institution** and who enrolled in SOAR before 2016 and received SOAR scholarship funds, more than one-third (38 percent) have not yet received a distribution. Interviews with program administrators and access providers suggest several reasons why some students have not requested their scholarship funds, including forgetting about their Invest529 accounts, not needing the funds, and difficulty navigating the disbursement process. SOAR program staff have undertaken several steps in recent years to increase disbursement rates, including notifying students each semester of unused balances, implementing a texting platform to communicate with students, and having the SOAR program manager present to SOAR high school seniors on how to access their accounts and submit an online withdrawal request.

TABLE G-2
Nearly half of SOAR scholarship funds have not been disbursed

Year joined SOAR	Total amount awarded to date	Total disbursed	Percent disbursed
2011	$168,000	$102,885	61%
2012	303,000	178,298	59%
2013	559,000	267,429	48%
2014	785,250	366,243	47%
2015	1,105,000	474,202	43%
Total	***2,920,250***	***1,389,057***	***48%***

SOURCE: JLARC analysis of SOAR student data from Virginia 529.
NOTE: Analysis includes students who enrolled before 2016, to allow for time to request fund disbursement.

After six years, unused funds revert to the SOAR master account and can be used to support new students in the program.

Three-fourths of SOAR participants enroll in a postsecondary institution

To date, 76 percent of students who have graduated from high school and received an award from SOAR have enrolled in one or more postsecondary institutions. This number was determined by matching 4,600 SOAR completers to National Student Clearinghouse data including public and private institutions, two- and four-year institutions, certificate and degree programs, and out-of-state schools. Seventy percent of these students have enrolled in public institutions, 16 percent in private institutions, and 10 percent in both types. Half enrolled in a four-year institution, a little more than half (53 percent) in a two-year school, and 26 percent in both. Two-thirds of students enrolled in only one postsecondary institution, and the remainder enrolled in more than one institution.

The high postsecondary enrollment rates, even for students who do not use their SOAR scholarship money, may indicate that the effects of the program are due not just to the scholarship, but also to the mentoring and coaching provided. Interviews with SOAR access providers support this interpretation.

SOAR increases participants' enrollment in postsecondary institutions

High postsecondary enrollment rates by themselves do not mean SOAR is effective. High school students who voluntarily enroll in SOAR may be more motivated than their peers to enroll in college and may have done so even if they hadn't participated in SOAR. Determining whether SOAR increased the likelihood that participants would go to college requires a statistical analysis.

The analysis compares postsecondary enrollment rates between students who completed all three years of the program and students who completed only one or two years. The key assumption underlying this approach is that SOAR is more effective for students who complete the program than for students who enroll in SOAR but do not complete all three years. Regression models were used to control for factors unrelated to SOAR that affect postsecondary enrollment, especially students' high school grade point averages.

The statistical analysis of SOAR data suggests that the program substantially increased participants' enrollment in postsecondary institutions. Students who were enrolled in SOAR for three years were 16 percentage points more likely to enroll in a postsecondary institution than students who were enrolled in SOAR for one year (Table G-3). The estimated impact of SOAR is larger for enrolling in a public institution than for enrolling in a private institution and larger for enrolling in a four-year institution than a two-year institution.

The estimated impact of SOAR is also substantial for **completing** a postsecondary credential, including certificates, associates degrees, and bachelor's degrees. For this analysis, the population is limited to those who enrolled in SOAR during the first three years of the program (2011–2013) to allow for at least five years after high school. This limits the population to about 600 students.

TABLE G-3
Estimated impacts of SOAR completion on postsecondary enrollment

Outcome	1 year in SOAR	3 years in SOAR	Estimated impact of SOAR completion (percentage points)
Ever enrolled in a post-secondary institution	64.0%	80.1%	16.1%
Ever enrolled in a public post-secondary institution	59.7	73.8	14.1
Ever enrolled in a private post-secondary institution	13.6	16.1	2.5
Ever enrolled in a 4-year institution	32.7	55.0	22.3
Ever enrolled in a 2-year institution	48.7	54.5	5.8
Ever earned a post-secondary credential (certificate, associates degree, bachelor's degree)	19.1	42.1	23.0

SOURCE: JLARC analysis of SOAR student data matched to data from National Student Clearinghouse.
NOTE: Analysis includes 4,614 students who enrolled in SOAR through 2020 to allow for delays in postsecondary enrollment.

Impacts may be overestimated to the extent that students who earn larger SOAR awards and spend more time in the program are more likely to have better outcomes than students who spend less time in SOAR, for reasons other than the program itself, a phenomenon known as selection bias. For example, students who stay in the program for the full three years may be more motivated to attend a post-secondary institution than students who leave SOAR after one or two years. To some extent, including initial GPA as an independent variable in the regression model helps control for such differences. In addition, selection bias is reduced because the analysis includes only students who enrolled in SOAR, rather than a comparison group of students who did not enroll in SOAR. To the extent selection bias remains, the estimated impacts may overstate the true impacts.

Appendix H: Virginia529's access and affordability partnerships

In recent years, Virginia529 has committed to providing additional funding to support students at risk of not entering or completing a postsecondary program. In 2021, the board approved more than $13 million in additional funding over FY21–23 to support seven access and affordability programs (Table H-1). The largest commitment is for $3.75 million to provide additional career coaches to support community college students enrolled in the Workforce Credential Grant program. The remaining $9.6 million in additional funds is for programs that provide support services to high school students at risk of not enrolling in a postsecondary program. For example, more than $2.6 million is being provided for scholarships through the GEAR UP Virginia program. GEAR UP is a federal grant program designed to increase the number of low-income students who are prepared to enroll in and complete postsecondary programs. GEAR UP programs are implemented by states and typically provide students with postsecondary scholarships and a wide range of support services, including academic advising, tutoring, career planning, financial aid advising, and mentoring. Additional commitments by Virginia529 provide funding for career coaches and mentors for foster care youth, low-income students, and Hispanic students.

TABLE H-1
Virginia529 has committed to providing more than $13 million in additional funding for higher education access and affordability programs (FY21–23)

Program	Purpose of funds	Funds committed
FastForward	Additional 15 career coaches [a] to support the New Economy Workforce Credential Grant program at each VCCS college	$3,750,000
GEAR UP Virginia	Scholarships [b] for the 2021–28 student cohort of the GEAR UP Virginia program	2,625,000
Virginia Foundation for Community College Education	Career coaches for additional 400 foster care youth and additional 4,200 underrepresented high school students in rural Virginia	2,650,000
Virginia College Advising Corps	29 additional advisors to serve an additional 8,700 high school students	2,025,000
Communities in Schools of Richmond	Pilot programs to provide social support services, tutoring, & other interventions at 3 high-poverty high schools in Central Virginia	1,007,500
Virginia Latino Higher Education Network	Summer programs to provide mentoring and coaching for Hispanic high school students	800,500
Great Aspirations Scholarship Program [c]	Additional 16 advisors in schools in areas of high need to provide career counseling, financial education, and financial aid advising	512,000
	Total	**$13,370,000**

SOURCE: JLARC analysis of information from Virginia529.
NOTE: [a] The 15 additional career coaches supplement the eight coaches at VCCS colleges, ensuring one coach at each of the 23 community colleges. [b] Virginia529 funding for scholarships allows GEAR UP Virginia to allocate additional funding for program services, including college and career preparation, advising, and financial aid awareness. [c] Funding is for FY22–23 only.

Because most of the additional access and affordability funding provided by Virginia529 is for GEAR UP and other programs that provide coaching and similar services for at-risk students, it is useful to review the research literature on the effectiveness of state GEAR UP programs. A substantial amount of academic research has focused on GEAR UP programs since they were authorized by Congress in 1998. The research has generally found GEAR UP to have a mixed impact on postsecondary enrollment and completion rates for at-risk students (Table H-2). Studies published in peer-reviewed journals have typically found that some GEAR UP support services are associated with higher enrollment and completion rates, while other program services do not have a statistically significant impact on student outcomes. For example, one study (Kim, 2021) found that one-on-one tutoring was associated with higher college enrollment rates but developing a plan for graduating from high school in four years was not. Other studies have found that GEAR UP is associated with improvement on some outcome measures but not others. For example, one study (Bausmith, 2012) found that increases in participation rates on the sophomore PSAT test were 10-18 percentage points greater at GEAR UP high schools compared with non-GEAR UP high schools. However, the study authors did not find statistically different increases in PSAT scores when comparing GEAR UP and non-GEAR UP high schools.

Academic research cited

Bausmith, Jennifer and Megan France, "The Impact of GEAR UP on College Readiness for Students in Low Income Schools," *Journal of Education for Students Placed at Risk* (2012).

Goodwin, Ryan et al, "Improving College Enrollment of At-Risk Students at the School Level," *Journal of Education for Students Placed at Risk* (2016).

Kim, Sanga et al, "Promoting Educational Success: Which GEAR UP Services Lead to Postsecondary Enrollment and Persistence?" *Educational Policy* (2021).

Leuwerke, Wade et al, "Narrowing the College Readiness Gap: Assessing GEAR UP Iowa's Intermediate Impact on Underserved Students," *Journal of Education for Students Placed at Risk* (2021).

Sondergeld, Toni et al, "Evaluating the Influence of an Urban High School Reform Effort on College Readiness and Access Outcomes: A Quasiexperimental Cohort Study," *Journal of Education for Students Placed at Risk* (2013).

TABLE H-2
Selected studies reviewing the impact of GEAR UP and similar support services on students at risk of not enrolling in or completing a postsecondary program

Study	Key findings
The Impact of GEAR UP on College Readiness for Students in Low Income Schools Bausmith (2012)	• Compared to non-GEAR UP high schools, *participation rates* for the sophomore PSAT increased 10-18 percentage points more than for GEAR UP schools. • There were no statistically significant differences between GEAR UP and non-GEAR UP schools in *performance* on the sophomore PSAT or AP tests. • Students at GEAR UP schools scored 2-3 percentage points higher on the reading and math sections of the SAT.
Improving College Enrollment of At-Risk Students at the School Level Goodwin (2016)	• Enrollment at 4-year institutions was 5 percentage points higher at high schools providing homework assistance, mentoring, and visits to college campuses compared to high schools not providing these services. • Enrollment at 2-year institutions was 9 percentage points lower at high schools providing at least 3 college preparatory services. • The study authors concluded that these college preparatory services were associated with a shift in college destination choices rather than an overall increase in postsecondary enrollment.
Promoting Educational Success: Which GEAR UP Services Lead to Postsecondary Enrollment and Persistence Kim (2021)	• Students who visited college campuses were 9 percentage points more likely to enroll in college and almost 13 percentage points more likely to persist to their second year of college. • One-on-one tutoring was associated with a 12 percentage point increase in college enrollment within 1-2 years of high school graduation. • Developing a 4-year graduation plan had no statistically significant effects on college enrollment or persistence.
Narrowing the College Readiness Gap: Assessing GEAR UP Iowa's Intermediate Impact on Underserved Students Leuwerke (2021)	• Students at GEAR UP high schools attended an average of 2.5 more days of classes than students at non-GEAR UP schools. • Low-income students at GEAR UP high schools showed 3.9 and 8.1 percentage point increases in math and reading proficiency, respectively, but among all students there was no statistically significant impact on math proficiency. • Low-income students showed a 2.8 percentage point increase in meeting the college readiness reading benchmark, but there was no statistically significant effect on math readiness.
Evaluating the Influence of an Urban High School Reform Effort on College Readiness and Access Outcomes: A Quasiexperimental Cohort Study Sondergeld (2013)	• On-time high school graduation rates increased from 31 percent for non-GEAR UP students to 45 percent and 51 percent for subsequent GEAR UP cohorts. • College enrollment within 1 year of high school graduation increased from 15 percent for non-GEAR UP students to 22 percent for GEAR UP cohorts. • GEAR-UP students showed statistically significant lower rates of behavior incidents compared to non-GEAR UP students, but the effect sizes were relatively small.

SOURCE: JLARC analysis.

DEFINED BENEFIT 529 SURPLUS FUNDS

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