State Council of Higher Education for Virginia

2020-22 Systemwide Operating and Financial Aid Budget Recommendations for Higher Education in Virginia

November 2019

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STATUTORY RATIONALE FOR SYSTEMWIDE OPERATING CALCULATIONS

The enabling legislation for systemwide operating calculations can be found, in part, in Sections 23.1-208 A through C, 23.1-203 and 23.1-303 of the Code of Virginia. These sections outline the responsibilities of the State Council of Higher Education for Virginia (SCHEV) as they pertain to the calculation of systemwide operating financial requirements of public higher education in Virginia.

Section 23.1-208 A through C charges the Council to develop policies, formulae and guidelines for the fair and equitable distribution and use of public funds among the public institutions of higher education. Further, this section states that such policies, formulae and guidelines as are developed by the Council shall include provisions for operating expenses and capital outlay programs and shall be utilized by all public institutions of higher education in preparing requests for appropriations.

Section 23.1-203 charges the Council to provide periodic updates on base adequacy funding guidelines adopted by the Joint Subcommittee for Higher Education Funding Policies.

Part A of 23.1-303 requires that SCHEV, following consultation with each institution and the Higher Education Advisory Committee, calculate each institution's basic operations and instruction funding need for each year of the next biennium and shall make that calculation available to the Governor, the General Assembly and all public institutions of higher education.

Summary of Major Elements:

The SCHEV budget and policy considerations for 2020-22 focus on four key areas:

1. Affordability
2. Access and completion
3. Talent development
4. Efficiency, effectiveness and long-term planning

These priority areas emerged over the last year as the result of several factors. Notably, SCHEV’s work with Lumina Foundation’s Strategy Labs has led to the development of a strategic finance plan for Virginia. Earlier this year, the Council released the findings and recommendations from a task force on educational attainment. In addition, Council members and staff have been involved in ongoing discussions including a one-day convening with institutions in March; meetings with institutions through the six-year planning process; two Council retreats; and regular and routine conversations with institutions and policy makers around Capitol Square.

In addition, the considerations also include a focus on improving equity for minority race/ethnicity, low-income and adult students, and regions of the state with low levels of educational attainment. It also focuses on biennial budgeting to support institutional planning and provide more stable and predictable funding.

The following includes the resolution approved by the Council at its October 31, 2019 meeting.

Council Resolution

WHEREAS, higher education and the attainment of a credential or degree contributes to greater individual and regional prosperity, including increased earnings, improved economic growth, greater levels of community engagement and improved health outcomes, and

WHEREAS, Virginia's public higher education system ranks as one of the best in the country when considering factors such as graduation rates, average net price, low loan default rates and high return on investment, it is a status that must be preserved and nurtured, and

WHEREAS, The Virginia Plan for Higher Education, the statewide strategic plan for the Commonwealth, focuses on placing Virginia as the best-educated state by 2030, and

WHEREAS, Virginia's higher education system is a shared responsibility of the state, institutions and students and parents to reach the highest level of performance and accountability, and

WHEREAS, budget recommendations for the 2020-22 biennium focus on addressing the statewide needs of affordability, excellence, access, success, talent development, efficiency, effectiveness and planning, now therefore, and

BE IT RESOLVED that the State Council of Higher Education for Virginia approves the Budget and Policy Recommendations for the 2020-22 biennium.

SUMMARY

Postsecondary education, whether it involves attainment of an industry certification or an advanced degree, contributes to state and regional prosperity and to the success and well-being of individuals. It also is associated with increased earnings, economic growth, greater levels of community engagement and improved health outcomes.

The Virginia Plan for Higher Education, the Commonwealth's statewide strategic plan, sets an objective to make Virginia the best-educated state by 2030. This objective focuses on increasing the degree and credential attainment rate from 54% of the working-age population to 70%, thereby meeting workforce demands and improving the well-being of individuals and communities.

To become the best-educated state, the Commonwealth needs to ensure that its system of higher education is accessible, affordable and aligned with workforce needs. Over the years, Virginia has made significant gains in the capacity and quality of its system of higher education. It now ranks as one of the best in the country when considering factors such as graduation rates, average net price, cost per degree, low loan-default rates and return on investment.

While these improvements are notable, Virginia faces challenges to meet the 70% attainment goal. This includes lower enrollment and completion rates by Hispanic, African-American and low-income students — populations that are expected to grow in the coming years — and raises a concern related to equity in our higher education system. Other challenges include Virginia's high tuition and fees compared to other states combined with state investment per student that is below the national average; lower-than-average faculty salaries compared to peer institutions; and shortages in high-demand areas that require a postsecondary credential.

In the 2018-20 biennium, the Governor and General Assembly invested over $285 million in Virginia higher education — a historical and notable reinvestment. General fund appropriations for Educational and General Programs (the primary operating funds for colleges and universities) increased 11.2% between FY 2018 and FY 2020. This increased investment also raised the percentage of state support for in-state undergraduates of calculated costs three percentage points from 45% to 48%. While this remains below the 67% target, it marks an improvement from recent years. The estimated general fund cost to make up this difference is approximately $668 million.

The additional funding in the current biennium included efforts to improve affordability and increase quality. As a result, tuition charges remained at last year's levels, students received more financial aid and faculty and staff received raises. In addition, the Governor and the General Assembly adopted many of the finance policy recommendations the Council advanced in 2018-20 biennium, including the option for institutions to establish reserve funds and setting limits on increases in non-Educational and General Program fees.

For the 2020-22 biennium, the Council's budget and policy recommendations continue to focus on preserving and enhancing access, affordability and quality. The recommendations are informed by the following: analysis of national and state data trends related to costs, financial aid, access and completion; review of six-year plans and performance pilot agreements submitted by institutions; an understanding of the current state budget environment; and ongoing discussions with state policymakers to identify key areas of interest for the state. Through this information gathering SCHEV organized the recommendations to improve the system in four strategic goal areas:

- **Affordability and excellence:** Recommendations focus on efforts to support growth in operational costs at the institutions with the expectation that additional support will lower the impact of tuition and fee increases; growing need-based financial aid for low- and middle-income students; and increasing the Tuition Assistance Grant program to students attending private, nonprofit institutions. They also consider funding to support faculty and staff salaries to allow institutions to be competitive and recruit top talent and for the state to consider alternative revenue sources through additional out-of-state enrollments.

- **Access and success:** Recommendations focus on improving information and resources available to students; substantially increasing funding for Virginia's community colleges; and investing in institutional efforts to improve access and completion.

- **Talent development:** Recommendations focus on expanding the impact of the newly established statewide innovative internship program; supporting investment in instructional and research equipment; increasing funding to support the Tech Talent Investment Program; and establishing an ongoing review of supply and demand to further align institutional programs with workforce shortages.

- **Efficiency, effectiveness and planning:** Recommendations focus on opportunities to support more stable tuition and fees growth in the coming years. This includes a review of costs and funding models and considering options to allow institutions and the state to save for a potential economic downturn through reserve funding and other strategies.

In addition, SCHEV includes recommendations for other areas of support that primarily include SCHEV agency operations budget requests and other requests through shared service initiatives.

The table below provides an overview of the Council budget recommendations. The remainder of the report provides detailed data for each goal area.

SCHEV General Fund Budget and Policy Recommendations for the 2020-22 Biennium

	FY 2021	FY 2022	Total
Affordability and Excellence			
Need-based financial aid	$ 15,143,000	$ 30,286,000	$ 45,429,000
Operational support to minimize tuition and fee increases*	$ 18,048,000	$ 32,271,000	$ 50,319,000
Tuition Assistance Grant (TAG)	$ 5,660,000	$ 7,770,000	$ 13,430,000
Office of the Qualified Education Loan Ombudsman	$ 100,000	$ 50,000	$ 150,000
Virginia Military Survivors Program	$ 750,000	$ 1,100,000	$ 1,850,000
Graduate financial aid	$ 1,000,000	$ 1,500,000	$ 2,500,000
Subtotal Affordability and Excellence	*$ 40,701,000*	*$ 72,977,000*	*$ 113,678,000*
Access and Success			
Guidance to Postsecondary Success-GPS	$ 1,500,000	$ 1,800,000	$ 3,300,000
Investment in community colleges	$ 20,000,000	$ 30,000,000	$ 50,000,000
Institutional support for student success*	$ 10,000,000	$ 10,000,000	$ 20,000,000
Subtotal Access and Success	*$ 31,500,000*	*$ 41,800,000*	*$ 73,300,000*
Talent Development			
Tech Talent Investment Program	TBD	TBD	TBD
Innovative Internship Program	$ 300,000	$ 1,300,000	$ 1,600,000
Higher Education Equipment Trust Fund debt service		$ 17,087,000	$ 17,087,000
Subtotal Talent Development	*$ 300,000*	*$ 18,387,000*	*$ 18,687,000*
Efficiency, Effectiveness and Planning			
Funding formula model reform	$ 150,000	$ 150,000	$ 300,000
Subtotal Efficiency, Effectiveness and Planning	*$ 150,000*	*$ 150,000*	*$ 300,000*
Other Areas of Support			
Agency operations	$ 467,000	$ 519,000	$ 986,000
Commonwealth Graduate Engineering Program (CGEP)*	$ 208,000	$ 440,000	$ 648,000
Virtual Library of Virginia (VIVA)	$ 2,400,000	$ 2,600,000	$ 5,000,000
Subtotal Other Areas of Support	*$ 3,075,000*	*$ 3,559,000*	*$ 6,634,000*
Total	**$ 75,726,000**	**$ 136,873,000**	**$ 212,599,000**

*Funding does not include estimates for non-general fund support. See SCHEV Budget Recommendations for additional amounts

Overall, the funding recommendations total approximately $212.6 million for the biennium (excluding estimates for the Tech Talent Investment Program).

Two cross-cutting components to the recommendations include a focus on equitable outcomes and biennial budgeting. For equity, the Council staff considered how each budget recommendation supports and improves outcomes for student groups that are not enrolling and completing at the same rates as other populations. This includes minority race/ethnicity, low-income and adult students and individuals, and certain regions of the state with low attainment rates. In order to achieve The Virginia Plan's goal of having 70% of Virginians holding a postsecondary degree or credential it is essential that we work to close these gaps in access, completion and attainment.

Virginia has worked closely with the Lumina Foundation through its strategic finance plan and recent visits to the state to help SCHEV and leaders understand the value of closing equity gaps. SCHEV plans to continue this partnership with Lumina to guide its work and expects to increase efforts in this area through a potential two-year grant.

For the biennial budgeting, the funding recommendations in the second year build on increases in the first year and recognize the full impact of the budget over the two years. This allows institutions to plan for more than one year which leads to improved tuition predictability for students and families.

OVERVIEW OF SCHEV OPERATING BUDGET AND POLICY RECOMMENDATIONS

The SCHEV budget and policy recommendations are provided through four major goal areas: affordability and excellence; access and success; talent development; and efficiency, effectiveness and planning. It also includes recommendations for other areas of support. The following five sections address each topic. Each section includes a summary of strengths and challenges for the area to support the recommendations. Additional data and analysis by institution are included in the appendices to support the recommendations and are referenced in the sections.

SECTION 1: AFFORDABILITY AND EXCELLENCE

To ensure our system is accessible and equitable for low- and middle-income students and families, the Commonwealth invests in need-based financial aid. In addition, it also provides support to institutions to keep overall tuition and fees as low as possible. Institutional funding is provided through what is known as Educational and General (E&G) programs. These operational costs include salaries and benefits for faculty and staff, operations and maintenance of buildings, and other nonpersonal services. Virginia provides a higher amount of financial aid compared to other states; however, it also has higher tuition and fees. The higher tuition is accompanied by lower-than-average state support per full-time equivalent student (FTE). The following table includes a summary of strengths and challenges in the area of affordability and excellence and includes summary recommendations to improve affordability and excellence.

AFFORDABILITY and EXCELLENCE	
Strengths/Opportunities	**Challenges/Threats**
• Low average net price (discount after aid) at several institutions	• Ranked 13th among states for highest tuition and fees
• Higher-than-average student financial aid compared to other states	• Ranked 37th among states for average state support/student
• Leveling off of student debt	• Variability in state support
• Lower tuition and fee increases in recent years	• Faculty salaries low compared to peer institutions (34th percentile)
• Low faculty-to-staff ratios	• Public concern of ongoing growth of college costs

RECOMMENDATIONS

Keep tuition increases low by supporting operating costs

Support faculty and staff increases if the state implements pay raises

Invest in need-based financial aid

Support alternative options for students through the Tuition Assistance Grant

Consider other revenues sources in funding determinations

Keep tuition increases low by supporting operating costs at public institutions

Two primary factors determine growth in institutions' tuition and fees: (1) changes in costs and (2) changes in state funding. The following recommendations attempt to align these two factors by providing estimates for increases in some costs and by providing funding options to support those costs with the anticipation that the added support would be reflected in lower tuition and fee increases than otherwise would occur.

Estimating costs

As part of the September Council meeting, SCHEV staff presented cost scenarios that included various assumptions of growth of total expenditures ranging from 2% to 3.5% per year based on various assumptions. The scenarios also included an estimated increase on only nonpersonal services. These assumptions focused on in-state undergraduates and the impact on tuition and fees.

After receiving input from stakeholders, SCHEV developed a cost scenario based on increases to nonpersonal services and operations and maintenance of new facilities coming online. While this assumption does not include salaries, which are a major component of institutional costs, SCHEV supports salary increases as an important component to recruiting and retaining high-quality staff and in keeping faculty and staff ratios low. However, SCHEV also notes that a decision by the state to fund faculty and staff salaries is part of a larger funding decision that would apply to all state employees.

Faculty salaries: If the Governor and the General Assembly agree to fund statewide salary increases, SCHEV recommends that faculty salaries increases consider the Commonwealth funding goal that the average salary of teaching and research faculty (T&R) at a Virginia institution should be at or above the 60th percentile of its national peers.

Based on the national faculty salary data for FY 2019, SCHEV estimates that the average salary of Virginia teaching and research faculty will rank at 34th percentile at baccalaureate institutions in FY20 when factoring state authorized faculty salary increase and assuming peer salary increases by 2.7% — a three-year national annual average increase in faculty salaries in FY20. In the event the Governor and the General Assembly provide funding for a statewide salary increase, one option would be to appropriate funds for faculty salary increases based on the peer-group comparison.

Under this approach, institutions that are further away from the 60th percentile would get larger increases than others. Under such a model, faculty salary increases in each year of the biennium would range from 2% to 5%. Suggested rates by institution are included in Appendix A. An estimate of the general fund cost associated with these increases is $160 million for the biennium.

Nonpersonal costs: Nonpersonal costs are based on an estimated growth of 2% over the total revenues of general fund and nongeneral fund revenues from institutions' FY20 activity-based budget submitted to the Department of Planning and Budget. It then applies a three-year average ratio of nonpersonal expenditures to total expenditures. The total cost estimate for nonpersonal service increases is $62.7 million for the biennium.

Operations and maintenance (O&M): New facilities coming online represent an additional cost increase to institutions. Based on a SCHEV survey of new facilities coming online, 38 new facilities across the institutions will begin operating in the next biennium. The estimated total cost increase for new O&M is $29.4 million for the biennium.

Other cost considerations — base adequacy: Another area of review that SCHEV conducted relates to base adequacy. Base adequacy is a calculation to estimate the "basic operations and instruction funding need of each public institution of higher education," as defined by the Higher Education Opportunity Act of 2011 — or the base costs of education.

Each year SCHEV staff calculates the costs for each institution's funding need and compares these costs to the total expected revenues to support students. Institutions that fall below the calculated costs are recommended for additional funding. No public institutions are expected to fall below the base adequacy calculations for the biennium. Eastern Virginia Medical School, which is included in the calculations, will be below costs by an estimated $4.4 million. The analysis is available in Appendix A.

Estimating the General Fund share to keep tuition and fees low

The total cost of Educational and General (E&G) programs is shared primarily between the state general fund and tuition and E&G fees. Typically, the more general fund an institution has, the lower its tuition and E&G fees will be.

To determine the state share for this set of recommendations, SCHEV staff applied a variable rate of state support based on an institution's mission and market. This approach aligns with the Council's interest to consider funding variations based on institution. The proposed fund split is based on the percentage of low-income students (using an estimate of the percentage of Pell Grant recipients) at an institution. This approach recognizes that institutions that serve higher percentages of students with financial need have less flexibility to increase tuition and fees. It also provides greater flexibility to institutions that have more capacity in the market to increase tuition.

The state goal to support calculated costs of in-state undergraduate students is 67%. Currently the state is below this goal, with a state average of 48%. Council recommends that funding to support institutions should include the minimum goal amount of 67% and increase up to 80% based on institutions' percentage of Pell Grant recipients. The table in Appendix A provides the percentage range. SCHEV staff then adjusted the overall institution general fund and nongeneral fund (representing graduates and out-of-state students) splits based on this change. The adjusted split is then applied to the nonpersonal and operation and maintenance costs.

By applying these assumptions, staff estimates that the total cost for the biennium would be $18.0 million in general fund for FY 2021 and $32.3 million in general fund in FY 2022 for a total of $50.3 million for the biennium. Expected costs by institution are provided in Appendix A as well as expected nongeneral fund amounts.

In their six-year plans, most institutions estimated that with no new general fund support, they might increase tuition by approximately 3% to 8%, depending on the institution. (A few institutions projected higher figures based on unique factors.) Institutions ultimately will set tuition increases based on a multitude of factors including a current assessment of the market, mission alignment, enrollment levels, general fund appropriations and estimated institutional costs.

To the extent that the Governor and General Assembly provide operating support to institutions, Council expects that institutions will reduce their expected increases as outlined in their six-year plans. Based on the current recommendation amounts, SCHEV estimates that tuition increases will be between approximately 1% and 2% lower than they would be otherwise. This expectation should be communicated to each institution and members of its Board of Visitors.

If the Commonwealth wishes to extend a tuition freeze for another year, the legislature, the Governor's office and institutions would need to consider costs in addition to those included in this recommendation. Common cost drivers include faculty and staff salaries, strategies to improve access and completion, and other institution-specific costs. If policy makers wish to pursue a freeze, SCHEV will be available to assist with determining the costs.

Invest in financial aid to students

As mentioned earlier, keeping tuition and fees low is one path to affordability for Virginians. While this strategy applies to all students, it comes at a higher cost to the state than one that balances investments between general institutional support and specific need-based financial aid for students.

This approach provides for lower tuition and fees for students with greater financial need and supports The Virginia Plan goal of providing greater access and completion for underrepresented students. The following information includes funding recommendations to address affordability while also meeting other priorities of the state.

Undergraduate need-based student financial aid

In 2019, the General Assembly directed SCHEV to review financial aid allocations and award policies including tuition revenue used for aid. This review primarily focuses on the state's need-based financial aid program, the Virginia Financial Assistance Program (VSFAP). Over the summer of 2019, staff worked with a committee of representatives from various levels of state government and public institutions.

After reviewing the current model for allocating state aid to institutions (known as the "Partnership Model") and developing other options for driving financial aid funding recommendations — including models that focused on the full cost of attendance, tuition and fees and expected family contribution (EFC) — staff recommends revisions to the allocation methodology. The proposed changes, which are reflected in the recommended allocation for the 2020-22 biennium, aim to meet the following goals:

- Improve the accuracy of the model by using the individual student's actual EFC.
- Minimize impact of higher tuition costs on driving financial aid allocations.
- Allocate funds based on both cost and enrollment of low- and middle- income students.

For more information on the identified concerns and recommended changes, please refer to the related agenda item.

Recommended allocation

After projecting the direct and indirect costs for the biennium and adopting the changes outlined in the review, staff calculated the institutions' aggregated unmet need. SCHEV staff then based the allocation recommendations on two criteria: (1) the average unmet need of the institution and (2) the number of students with a low expected family contribution, which recognizes and encourages enrollment of low-income students.

SCHEV staff chose to base its recommendations on average unmet need in order to better account for severity of student need. Using percent of total aggregate need, as in previous years, potentially underemphasizes the high unmet need for individual students, essentially treating five students with $1,000 each in unmet need the same as one student who has $5,000 in unmet need. By using average unmet need and setting a $5,000 threshold for public four-year and $2,500 for public two-year institutions, the funding model focuses on those institutions whose students have high levels of individual need.

SCHEV staff will continue to study the allocation model including the potential of setting long-term funding and outcome goals based on institutions' average unmet need. As a reference, the cost to buy down the 100% of the unmet need beyond the averages of $5,000 and $2,500 would cost a total of $364.8 million, or $141.5 million more than the 2019-20 allocations.

For the 2020-22 biennium SCHEV recommends a total increase of $45.2 million, with approximately two-thirds driven by the average unmet need allocation and one-third driven by the expected family contribution allocation. To determine the amount for average unmet need, staff set the threshold of average unmet need at $5,000 at the four-year institutions. Institutions whose average unmet need exceeded this threshold are funded at 15% of the difference. For the two-year institutions, staff set a minimum threshold of $2,500, with 10% of the difference funded by the Commonwealth.

For the expected family contribution allocation, staff assigned amounts based a student's expected family contribution. Students attending baccalaureate institutions with $0 in expected family contribution are assigned a value of $350, with the value decreasing as expected family contribution increases.

The sum of these two allocations results in the total allocation recommendation. These thresholds can be adjusted accordingly if the overall funding availability is changed. The table in Appendix B provides the funding amounts by institution.

Virginia Military Survivors and Dependent Education Program (VMSDEP):

The VMSDEP provides assistance to Virginia's veterans who have made significant personal sacrifices including loss of life (killed in action), liberty (prisoner of war or missing in action) or "limb" (90% or more disabled as result of service) by waiving tuition and required fees and providing a stipend to their dependents. Usage of the program is difficult to forecast as it is subject to sudden increases and decreases, but the Commonwealth would want to avoid underfunding and not fulfilling its promise to these veterans.

The program moderated during the past several biennia; however, in FY 2019 participation increased by a near historic high of 13.6%. Current funds remaining from FY 2019 are sufficient to cover projected expenditures for FY 2020. However, SCHEV staff estimates that additional funding of $750,000 for FY 2021 and $1.1 million for FY 2022 is needed to cover a potential 15% annual increase in usage.

Office of the Qualified Education Loan Ombudsman

While not a direct aid program, the Office of the Qualified Education Loan Ombudsman serves as a resource to student loan borrowers who have difficulty with their loans. The General Assembly established the office within SCHEV in 2018. Another responsibility for the office is to administer an education course that enables students to make more informed borrowing decisions. This fall, after completing a request for proposals to secure a vender to administer the education course, staff determined that current funding levels are insufficient to contract with a full-service, turnkey proposal.

To fully implement a full-service, professional-grade course, staff estimates that it would require $100,000 for initial start-up costs and $50,000 annually to administer the course and increase outreach to individuals. Lower-cost options are available but would reduce quality, be more labor-intensive to design and maintain, and possibly require data storage costs. In the interim, SCHEV plans to implement a minimal-cost solution through the development of handouts and in-house developed videos until a longer-term solution becomes available.

Virginia Graduate Commonwealth Award

While most of the attention on affordability is focused on undergraduate enrollments, graduate programs also are critical to the economic health of the Commonwealth. The Graduate Commonwealth Award is a program designed to better position the institutions to attract and support the best students for their graduate programs (the institution can decide whether to award based on need or merit criteria).

The program last received an increase in appropriations in FY 2018 award year when the Governor and the General Assembly added $1.3 million (6.1% increase). To account for increased tuition, improve ability to attract outstanding students, and promote economic growth, staff recommends that the graduate financial aid for research institutions be increased by $1 million in FY 2021 and $1.5 million in FY 2022. Appendix B includes recommended graduate aid award amounts by institution.

Support alternative options for students through the Virginia Tuition Assistance Grant Program (TAG)

TAG provides an opportunity for students to consider enrollment into one of Virginia's private nonprofit colleges and universities. It provides students more options and supports institutions that complement and relieve pressure on public colleges and universities. While not a need-based program, it serves a large number of low- and middle-income students. Over the last two biennia, the Governor and the General Assembly have increased the maximum undergraduate award from $3,100 to $3,400. From 2018-19 to 2019-20, the Governor and the General Assembly increased total funding for the program from $65.8 million to $71.1 million, or 8%.

TAG institutions expressed a concern that the recent tuition freeze at public institutions could place these institutions at a competitive disadvantage. The TAG institutions seek an increase of the average award for full-time students of $1,000, from $3,400 to $4,400. The cost of each additional $100 for TAG is approximately $2 million; therefore a $1,000 increase would require an additional $20 million per year.

Staff estimates that the impact of the tuition freeze on the purchasing power of the Tuition Assistance Grant is approximately $175. This is based on (1) an estimate of the per-student cost "savings" to a student attending a public institution, and (2) a historic comparison of the TAG award to the general fund appropriation per full-time-equivalent in-state undergraduate student at public baccalaureate institutions. To recognize the impact of the tuition freeze, staff recommends that TAG awards be increased, as a starting point, $175 in each year of the biennium. In addition, based on the recommended general fund increases for public institutions, staff recommends that the TAG award be increased by another $100 in FY 2021 and $150 in FY 2022. The net effect of this recommendation would be to increase the award to $3,675 in FY 2021 and $3,725 in FY 2022. It would be the largest increase in the program since 2013-14. This increase will require an additional $5.7 million in FY 2021 and $7.8 million in FY 2022.

In addition, to the extent one-time revenues are available in the upcoming biennium, the Governor and General Assembly should consider devoting a portion of such revenues to financial aid in an amount sufficient to fund TAG up to $4,000 in the second year and a proportional increase in financial aid for public institutions above the current amounts recommended by Council.

Consider other revenue sources in funding determinations

The options provided for financial aid and tuition moderation do not consider other funding sources that institutions may have to generate revenues to support in-state students. One source includes revenues generated from enrollment of students from outside of Virginia. These students pay higher tuition, which institutions use to improve quality for all students and reduce tuition pressures for in-state students. The Appropriation Act currently limits the percentage of out-of-state students whom institutions can enroll. The limitation currently affects four institutions: James Madison University, William & Mary, University of Virginia and Virginia Tech. Several of these institutions indicated an interest to pursue higher percentages of out-of-state enrollments as part of their Performance Pilot proposals authorized by legislation this year.

In 2018 and 2019, SCHEV recommended that institutions that meet approved enrollment projections for in-state undergraduate students and have the capacity to increase out-of-state enrollments have the flexibility to enroll more such students. Council also observed that enrollment of more out-of-state students could be beneficial in meeting high-demand workforce needs, supporting institutional excellence and expanding economic prosperity in the Commonwealth.

If institutions are granted greater flexibility to enroll out-of-state students, then the state may wish to consider how general fund support be allocated among institutions to recognize the increased revenues from out-of-state students. To address this issue, SCHEV has proposed budget language that the Governor and the General Assembly could use as a starting point for modifying the current limits on out-of-state enrollments. It could be included in the Appropriation Act on a pilot basis to see the extent to which institutions choose to exercise this option and what impact it has on other institutions, state needs and other factors. The proposed language states:

Section 4-2.01b.2

e) Institutions that meet enrollment projections for in-state undergraduate students approved by the State Council of Higher Education for Virginia may exceed the nonresident limit so long as the institution continues to address statewide focus areas of access, affordability, completion, excellence, talent development and equity. The state may consider the additional revenues generated beyond nonresident costs in state funding decisions and determine expected outcomes for institutions that exceed the limit.

SECTION 2: ACCESS AND COMPLETION

To reach the state's 70% attainment goal by 2030, higher education must be accessible to all students. In addition, it must work to support all students to complete once enrolled. While Virginia has the second-highest graduation rate in the nation among public baccalaureate institutions, the system lags in enrollments and completions for some populations and at some institutions. Postsecondary enrollment rates for Hispanic, African-American and low-income individuals do not match those of the general public or of recent high school graduates, which potentially places Virginia's goal to reach 70% attainment by 2030 at risk. In addition, while some institutions have closed gaps in their rates of completion, the overall state rates continue to lag for some students and at some institutions. This section provides recommendations to improve access and completion with a particular focus on populations with lower enrollment and completion rates through an equity focus.

ACCESS and COMPLETION	
Strengths/Opportunities	**Challenges/Threats**
• Second-highest public graduation rate compared to other states • Institutional and community-based efforts offered in some areas to support access and completion efforts • Improving system of student transfer between community colleges and universities	• Lower rates of enrollment and completion by Hispanic, African-American and low-income students • Insufficient awareness of the value of higher education and opportunities to pursue education beyond high school

RECOMMENDATIONS

Support access through increased awareness and support through the Guidance to Postsecondary Success (GPS) initiative

Attract students that may not attend postsecondary education

Provide funding for institution-based efforts that increase access and completion

Support access through increased awareness and support: Guidance to Postsecondary Success (GPS)

Enrollments of recent high school graduates in Virginia into postsecondary have remained relatively flat over the past five years at around 70%. In addition, this enrollment rate also is lower for people of color and economically disadvantaged students. Without a change in these enrollment rates and among geographic communities across the state, Virginia will maintain or perhaps widen its gaps in overall attainment.

In addition, regardless of where one lives in the Commonwealth, technology is demanding a higher-skilled workforce, with the greatest margin of need at the sub-baccalaureate level. These workforce demands are compelling but middle- and low-income families see the cost of higher education as a barrier to postsecondary enrollment and often lack the information and resources to navigate the complex preparation, application and financing steps to postsecondary enrollment. As a result, families, cautioned by stories of rising student debt and misinformation, call into question the once resolute value of higher education and return on investment. Other states support statewide efforts to raise awareness of postsecondary options for students and families and help them navigate the complex choices they must make to determine the right fit for their education.

The Guidance to Postsecondary Success (GPS) is a proposed initiative to respond to these concerns. It focuses on enhancing existing efforts such as SCHEV 1-2-3 Go! to prepare, apply and pay for college awareness campaigns and events by coordinating professional development for secondary and access-provider staff, increasing advising capacity in underserved high schools, supporting early college testing for students in high school, and improving financial aid application completion activities (commonly referred to as FAFSA completion).

GPS will provide Virginians with equitable access to the necessary information, resources and experiences to help ensure enrollment and completion of a valued credential to become more engaged citizens. The multipronged approach is aimed at one destination — increasing postsecondary enrollment, particularly for low- and middle-income students and minority race/ethnicity students. SCHEV recommends $1.5 million in FY 2021 and $1.8 million in FY 2022 for this initiative. Staff notes that a coordinated effort with the Virginia Department of Education is required to successfully implement this initiative. Staff also supports funding and coordination across the agencies to achieve this goal.

Attract students that may not attend college and who are less likely to complete

In addition to more awareness and support for students to make decisions, Virginia also will need to enroll more students who traditionally may not plan to attend college and ensure they complete a credential to meet the expected workforce demands by 2030. There are several demonstrated strategies that can support increased enrollment and completion. Staff recommends funding in three areas to support this effort.

Invest in community colleges to attract and support completion of individuals in skilled trades

Based on work through Lumina Foundation Strategy Labs to develop a strategic finance plan for Virginia, SCHEV staff identified a gap in the supply of skills gained in sub-baccalaureate degrees and certificate programs. Recognizing this need, the finance plan calls for an increased investment and focus on producing more certificates and associate degrees.

A potential barrier to enrollment in these degree and certificate areas is the high tuition at Virginia's public associate-degree granting colleges — currently the eighth-highest in the nation. Over the past several years, community college enrollments have declined in Virginia and nationally, especially among low-income students. To help attract students who may not consider college as an option, Virginia could explore policies to considerably reduce or eliminate tuition, fees and books for students. Many states have launched initiatives through community colleges to address workforce needs, support low- and middle-income students and improve affordable career pathways through postsecondary education.

Areas of focus for an investment could include students pursuing programs in high-demand occupations, dual enrollment and other programs of need in the state. Focus areas should include policies that incentivize completion such as providing larger awards for full-time enrollment and for low-income students to help them afford expenses beyond tuition and fees such as books, transportation and other living expenses.

While there are many approaches the state could implement, SCHEV supports this needed investment. Approaches could be offered through credit or noncredit programs with an increased investment in both operations (to improve student services, support completion and keep tuition and fees low) and increased financial aid (to increase access for low- and middle-income students). SCHEV recommends $20 million in FY 2021 and $30 million in FY 2022 to support community colleges.

Broaden access to alternative delivery models for nontraditional students

To address concerns of limited access to affordable postsecondary opportunities for students who may not live close to a college or for students who are not able to attend college during the timeframes in which courses are offered, the state may wish to expand the availability of options in this area. While there are many online options for students, the majority are offered through higher cost private and sometimes for-profit institutions.

The General Assembly created the Online Virginia Network to address completion of a degree and promote online opportunities to students. Many other states have invested in online programs to support greater access and completion. To continue to support this effort, additional funding could be provided in the form of aid to students that plan to participate in OVN or related online programs. If the focus were on completion, aid could target students who are within a certain threshold of credits needed to graduate.

Another approach, focusing on students who are less mobile and live in areas without a nearby college or university, would be to provide aid to students to enroll in programs offered through nearby higher education centers and online institutions.

While SCHEV does not provide a formal funding recommendation, if any additional investments are made in this area SCHEV recommends that the state develop expected outcomes and targets and report annually on progress.

Invest in institution-based efforts to support completion

As part of the six-year plan process, SCHEV asked institutions to submit proposals that improve completion and post-graduate success. The proposals fall into four themes:

1) Student career and academic development
2) Affordability
3) Experiences connecting students to the campus
4) Staff professional development and re-alignment of processes

Between the six-year plans and the institutional Performance Pilot proposals submitted, institutions requested approximately $30 million per year to support success in these areas. Of these requests, institutions also included requests for financial aid. Since SCHEV provides additional funding recommendations in the student aid section, this lowers the total amount. Funding requests in this area could be prioritized based on institutions with lower completion rates and low expenditures per student to enhance the level of services provided and increase completion. SCHEV staff recommends support for institutional-based efforts in this area of approximately $20 million per year, with half coming from the general fund and half coming from nongeneral funds.

As part of this funding amount, one area of increased focus is to consider support for awareness building and best practices for access and completion through the Center for Social Mobility. Virginia must not only increase educational attainment rates but also close the gaps in the differing rates of attainment that exist across its population and its regions. Currently, Virginia's low-income college student graduation rates are 20% below those of high-income students and 12% below those of middle-income students. In response to these statistics and the charge to fulfill its mission as an accessible public institution, Old Dominion University established the Center for Social Mobility. It has gained recognition as a national resource and hosts the National Social Mobility Symposium.

Old Dominion University created the center to educate higher-education leaders on social mobility. The center addresses both access and completion through examining organizational structures, removing barriers and developing student success strategies that lead to degree completion and employment after graduation. With additional support, the center can increase its services to include technical assistance, reports and professional development events for institutions in Virginia and for the state in assessing its progress toward closing equity gaps.

SECTION 3: TALENT DEVELOPMENT

Students attend college for many reasons, but a primary motivating factor is the ability to secure a good job. Moreover, Virginia has a strategic interest in ensuring its investments in postsecondary education aligned with the needs of tomorrow's workforce to keep Virginia economically competitive. The Commonwealth and institutions have invested in and increased support for talent in Virginia. This includes the commitment of over $1 billion to support tech talent in computer science related degrees, increased investment in STEM-H and additional growth in this area, and funding for and implementation of internships. While these serve as strengths, the Commonwealth faces challenges in terms of additional shortages in certain sectors and the need to improve information available to further align workforce shortages. The following table includes a summary of strengths and challenges related to talent development with recommendations to improve in this area.

TALENT DEVELOPMENT	
Strengths/Opportunities	**Challenges/Threats**
• Commitment of $1 billion to meet tech talent initiative to support increased need for graduates in computer science and related degrees • Increase in the percentage of graduates in STEM-H related fields and funding support in these areas • Alignment of bachelor's teaching programs to address teacher shortage • Funding and implementation of new innovative internship partnership program and non-degree credentials through the New Economy Workforce Credential Grant	• Shortages in many employment sectors such as health care, teaching, computer science and skilled trades • Insufficient information to identify and report workforce shortages • Graduates leaving Virginia at higher rates • Expected shortages in sub-baccalaureate credentials (associate degrees, certificates and industry certifications)

RECOMMENDATIONS
Grow high-quality internships statewide
Grow the Tech Talent Investment Program to reach legislative commitment
Support investment in instructional and research equipment
Assess workforce shortages to better align higher education

Grow high-quality internships statewide

Internships and other forms of work-based learning present one pathway for the Commonwealth of Virginia to achieve the goals of meeting current state and regional workforce needs and supporting regional economic growth and diversification plans by attracting and retaining talent in the Commonwealth, enhancing the job readiness of students, enhancing higher education affordability and timely completion for Virginia students, and furthering the objectives of increasing the tech talent pipeline.

After an initial appropriation to SCHEV for an internship grant competition in 2018, the 2019 General Assembly expanded the effort and created the Innovative Internship Fund and Program (Va. Code § 23.1-903.4). The purpose of the program is to expand paid or credit-bearing student internships and other work-based learning opportunities in collaboration with Virginia employers. The program comprises institutional grants and a statewide initiative to facilitate the readiness of students, employers and institutions of higher education to participate in internship and other work-based learning opportunities.

SCHEV launched the statewide initiative in spring 2019 with the creation of a Policy and Employer Advisory Panel, exploration of existing strategies from Virginia and elsewhere for successful investments in internship and other work-based learning opportunities, regional meetings of internship coordinators at businesses and institutions of higher education and discussions with entities that are successfully operating internship programs.

After receiving input from several areas, the panel identified a goal to place Virginia as the best state for internships. To do so, the panel established the following objectives: Ensure that all students enter an internship prepared with the basic work skills to learn how to apply classroom learning to the workplace; ensure that all employers are prepared to hire and support paid interns; and ensure that all institutions support experiential learning, including internships, as an integral (not extra) part of a student's education.

Many institutions are increasing efforts in this area and several mention additional resource needs in their state budget requests and through their Performance Pilot proposals. In addition, private nonprofit institutions receiving the Tuition Assistance Grant expressed an interest to participate in the growth of this program, as many employers expressed an interest in interns regardless of what school they attend.

The current Appropriation Act includes $700,000 for SCHEV to develop and implement the Innovative Internship Program. To implement the statewide program at scale, continue to support institutional interests in this area, and expand to institutions participating in the Tuition Assistance Grant program, SCHEV recommends increasing this fund by $300,000 in FY 2021 and $1.3 million in FY 2022.

Grow the Tech Talent Investment Program to reach the legislative commitment

Another initiative that supports talent development is Tech Talent Investment Program, approved by the Governor and the General Assembly in 2019. The initiative will increase the number of graduates in computer science and related programs by at least 25,000 over the next 20 years. The investment in computer science and related graduates was a significant part of the proposal state officials made to attract Amazon to Virginia. It also will benefit employers across the state that are in need of individuals with these skills. The FY 2020 budget includes $16.6 million for this purpose. This program is expected to need an additional support annually to support the growth in these needs. The additional funding amounts will be determined as the Governor and General Assembly staff continue to work on MOUs this fall.

Support investment in instructional and research equipment

In 2000, the Council established an equipment allocation methodology for the Higher Education Equipment Trust Fund (HEETF) based on institutional needs for (1) regular inventory replacement and (2) technology upgrades. Appendix provides tables related to recommendations for HEETF.

A nine-year replacement cycle, issued for instructional and research equipment, is applied to the current institutional equipment inventories in the Educational and General programs of instruction, research and academic support. The HEETF addresses half of the identified need and institutional operating funds cover the other half. To continue the progress made in the 2018-20 biennium with updating institutional equipment inventories, the annual replacement need to be covered by the HEETF will be $78.8 million per year or $157.6 million for the 2020-22 biennium (see Appendix C, Table 2 for detailed information for each institution).

The HEETF model also includes funding for computers for student use. The Council established a goal of providing 7% of full-time equivalent students with a microcomputer. In 2000, this rate was considered adequate to accommodate students' needs for access to computer resources. Since then, allocations have been sufficient to maintain this level of coverage. To continue supporting the 14:1 students-to-computer ratio at a cost of $1,800 per computer, an additional allocation of $13.1 million per year is needed. This policy allows for computer replacement approximately once every three years.

In 2015, SCHEV staff recommended that the Commonwealth establish a pooled bond authorization to finance, as needed and over time, new or renovated facilities and equipment for research activities. This year, using the methodology for equipment funding based on research equipment replacement, staff calculates $22.2 million to maintain current funding levels in research.

If funding is limited, in addition to the research equipment allocations in Table 2 SCHEV recommends that the Governor and General Assembly prioritize additional funding for George Mason University, Old Dominion University and the Virginia Institute of Marine Science, as the percentage of their HEETF research allocations are below amounts comparable to their research expenditures.

Estimated debt service payments by institution total $13.7 million from the general fund for the traditional HEETF calculation and $3.4 million from the general fund for the Research HEETF calculation in FY2022, amounting to an overall total of $17.1 million in FY2022 (see Appendix C, table 3 for a breakdown by institution).

In addition to recommending additional funds for research equipment through the Higher Education Equipment Trust Fund, SCHEV also remains committed to the mission of the Virginia Research Investment Committee. While it is possible that VRIC will undergo some changes in the 2020 General Assembly session, it will remain focused on translating university research to the market. A recent review highlighted the need for additional investment to support the following areas: improving university capacity for commercialization; focusing on strategic domain areas, as reflected in the Commonwealth Technology Strategic Roadmap; developing statewide entrepreneurial resources; and organizing around objectives and accountability. While SCHEV offers no specific recommendation at this time, staff believes that these initiatives could be a good use for one-time funds.

Assess workforce shortages to better align higher education

SCHEV, and the Commonwealth in general, have tremendous reserves of publicly available data related to supply and demand. However, these data are not always available in forms that readily support strategic decisions by institutions, policymakers, businesses and economic developers. Having staffing resources with expertise to assess current and future workforce demand and potential shortages by sector and occupation would help the Commonwealth and institutions better plan demand in programs and student skills.

SCHEV staff proposes two collaborative efforts to improve workforce alignment. The first is to better coordinate among multiple entities that already produce data and have expertise in this area. This includes the Governor's chief workforce development advisor, the Virginia Employment Commission, the Virginia Economic Development Partnership, the Virginia Board for Workforce Development and the Weldon Cooper Center. Second, SCHEV proposes to periodically assess supply and demand to determine existing shortages by sector, occupation and skills to determine additional programming at institutions that may be needed.

SCHEV is working on a project to explore this option and supports additional efforts by the Governor and General Assembly to ensure that higher education and other providers of education and workforce services have access to resources and subject matter expertise to support short- and long-term planning.

SECTION 4: EFFICIENCY, EFFECTIVENESS AND PLANNING

To ensure stable tuition and fees for students and families, the Commonwealth should explore alternative approaches to keep the growth in costs minimal while maintaining excellence in our higher education system. A recent review of Virginia's public higher education system shows that the state has a lower-than-average cost per degree compared to the national average and similar state systems and is ranked first in the nation by SmartAsset when reviewing metrics such as low faculty to student ratios, average net price, average earnings and graduation rates. While these rankings are positive, the Commonwealth faces challenges when state funding fluctuates (which may occur if the state institutes funding cuts if an economic downturn occurs), a lack of consensus by policymakers and institutions on measures of efficiency, and faculty salaries that fall below peer institution averages. The following table summarizes these strengths and opportunities for this area and provides recommendations for the biennium.

EFFICIENCY, EFFECTIVENESS AND PLANNING	
Strengths/Opportunities	**Challenges/Threats**
• Lower than average cost per degree • No. 1-ranked system of higher education in the nation • Recent limits placed on growth of non-education and general fees to contain costs at no more than 3% annually • Allowance of institutions to carry over up to 3% general fund education related allocations for reserve funding.	• Potential economic downturn • Lack of agreement on measures of efficiency and effectiveness • Lack of clarity on expected institutional performance relative to state needs • Competitive faculty salaries but lower than institutional peers • Growing demand for operational support and maintenance for classrooms, libraries and laboratories

RECOMMENDATIONS
Review costs of higher education and explore outcomes-based funding
Suspend Institutional Performance Standards for Level II Measures
Further support reserve funding to prepare for an economic downturn

Review costs of higher education and explore other funding strategies

The state currently provides general operation support to institutions based on their expected base costs (base adequacy) and the number of in-state students attending the institution. This estimate differentiates cost based on program type, faculty type and instructional costs, but it does not differentiate based on the types of students served, the potential additional costs to serve underrepresented students. While there is an efficiency component implied in this model, Virginia does not formally define or measure efficiency and effectiveness of its higher education system; nonetheless policymakers question increased costs. In addition, other states have implemented outcomes-based funding models and the General Assembly passed legislation in 2019 to develop performance pilots with institutions.

SCHEV could review cost models, measures of efficiency (see additional details below) and expected outcomes for the use of state funds to further align with state needs. This review could follow a process similar to the current financial aid study.

As part of this review process, SCHEV also could undertake a more formal review of efficiency and effectiveness and develop an inventory of successful efforts, both to highlight existing efforts and to identify solutions that can be more widely applied. For instance, the University System of Maryland created an effectiveness and efficiency work group to improve efficiency in four areas: cost avoidance, cost savings, revenue and strategic reallocation. Over the course of a decade, the working group's efforts yielded $356 million in cumulative savings. Also, the National Association of College and University Business Officers' (NACUBO) Economic Models Project developed a tool to assist chief business officers and other college and university leaders explore new models to ensure financial sustainability. Through convening webinars and other means, SCHEV can elevate these and other resources. The Commonwealth also could contract with an outside consultant to provide an objective, comprehensive "efficiency and effectiveness" review of structures, processes, policies and outcomes in public institutions and state government generally. The expected cost to conduct this review is $150,000 annually or $300,000 for the biennium. The following is recommended budget language:

> Page 199, about line 4, after "The Council shall report its findings and provide a status report on the implementation of the policy and process

changes to the House Appropriations and Senate Finance Committees by December 1, 2018", delete existing language in item K and insert:

K. 1. Out of this appropriation, $150,000 from the first year and $150,000 from second year from the general fund is designated to support related costs of undertaking a review of higher education costs, funding needs, appropriations and efficiencies.

2. The State Council of Higher Education, in consultation with representatives from House Appropriations Committee, Senate Finance Committee, Department of Planning and Budget, Secretary of Finance and Secretary of Education, as well as representatives of public higher education institutions, shall review methodologies to determine higher education costs, funding needs and appropriations in Virginia. The review shall identify and recommend: (1) methods to determine appropriate costs; (2) measures of efficiency and effectiveness; (3) strategies to allocate limited public resources based on outcomes that align with state needs related to affordability, access, completion and workforce alignment; (4) the impact of funding on underrepresented student populations, and (5) a timeline for implementation.

3.The review shall build on existing efforts including the assessment of base adequacy, recommendations provided through the Strategic Finance Plan developed by Lumina Strategy Labs, and peer institutions comparisons and determine if existing funding models though be updated or replace. It shall also build on promising and include input from Virginia's institutions, policy makers and other education experts.

4.The Council shall submit a preliminary report and any related recommendations to the Governor and the Chairmen of the House Appropriations and Senate Finance Committees by November 1, 2020 with a final report by July 1, 2021.

Suspend Institutional Performance Standards Level II measures

Level II institutions (as defined by the Restructured Higher Education Financial and Administrative Operations Act of 2005) are required to adopt at least one education-related measure for each area of expanded operational authority. Some of these measures have been in place for almost 10 years.

During the 2018 General Assembly session, a budget amendment modified language in § 4-9.02.b to remove these measures from the Institutional Performance Standards (IPS) certification process. However, the institutions continue to report results for these performance measures even when they are not tied to performance funding. Staff recommends that these measures be suspended through 2020-2022 as SCHEV reviews the performance assessment process for these measures. It should be noted that Level III institutions, which have more expanded authority, do not have a similar requirement related to education-related performance measures.

The following is proposed budget language:

> § 4-9.02.b LEVEL II AUTHORITY
>
> Page 656, paragraph b., at the end of the paragraph, after "Virginia." insert:
>
> *"The development and administration of education-related measures described in paragraph b. and in § 23.1-1003 A.3. is suspended through 2020-2022."*

Further support reserve funding to prepare for an economic downturn

Our public system of higher education has faced 11 state budget reductions in the past 20 years; tuition for in-state undergraduate students has risen, in part, in an effort to offset these cuts. Supporting additional funding reserves in a time when the economy is strong allows Virginia to prepare for the next economic downturn and protecting growth in tuition and fees.

In 2018, institutions of higher education were authorized to establish an institutional reserve fund supported by any unexpended education and general appropriations of the institution at the end of the fiscal year. Institutions can carry over education and general unexpended balances to establish and maintain a reserve fund in an amount not to exceed three percent of their general fund appropriation for educational and general programs in the most recently-completed fiscal year. Any use of the reserve fund requires approval by the Board of Visitors of the affected institution, and the institution shall immediately report the details of the approved plan for use of the reserve fund to the Governor, the secretary of education, the secretary of finance and the chairs of the House Appropriations and Senate Finance committees.

While an institution can carry over up to 3% of its general fund appropriation, this amount covers only a portion of an institution's expenses. To enhance stable funding further, the state could: (1) allow that the 3% of reserve funding also apply to nongeneral funds as well as general fund; (2) establish a statewide reserve fund for higher education or (3) further support funding for the state's rainy day fund and emphasize that funds should prioritize higher education. Funding to support the reserve could come from a combination of state and institution funds.

SECTION 5: OTHER INITIATIVE AREAS

While the following initiatives also meet the primary statewide goal areas, they primarily include funding for consortium and shared service approaches to areas including library services and open textbooks to reduce costs through the Virtual Library of Virginia (VIVA) and the Common Graduate Engineering Program (CGEP). A list of their requests is included below.

Virtual Library of Virginia (VIVA)

VIVA is the academic library consortium of Virginia, serving 72 of the nonprofit academic libraries including all 39 public colleges and universities, 32 independent universities and the Library of Virginia. Through cooperative and shared collection development, resource sharing, open and affordable programs, education and training opportunities and strategic initiatives, VIVA directly supports academic institutions across the state in providing access to high-quality academic resources for students and faculty at Virginia institutions.

The program seeks funding in four priority areas:

- Priority 1: Sustain current collections and provide support for emerging disciplines and formats. ($800,000 in FY 2021 and $1 million in FY 2022).
- Priority 2: Expand the statewide initiative for open and affordable course content in Virginia ($500,000 in FY 2021 and FY 2022).
- Priority 3: Support for the VIVA private nonprofit institutions through a pooled funds program with matching provided by nonprofit institutions ($100,000 in FY 2021 and FY 2022).
- Priority 4: Statewide digital access to journal archives ($1 million in FY 2021 and FY 2022).

The VIVA requests total approximately $5 million for the biennium. SCHEV staff recommends continued support of this shared service model.

Commonwealth Graduate Engineering Program

The Commonwealth Graduate Engineering Program (CGEP) is a consortium of six Virginia universities that delivers graduate engineering education to Virginia's scientists and engineers. The program is designed to provide an opportunity to obtain graduate degrees and certifications through a collaborative course-sharing model and distributed learning technologies. The program also works directly with industry partners to determine and address workforce training needs.

CGEP submitted a supplemental budget request to SCHEV. For supplemental budget requests, the Appropriation Act directs the participating CGEP institutions to submit a request to SCHEV for review and recommendation to the Governor and the General Assembly. CGEP is requesting approximately $1.6 million for the biennium to expand offerings to meet industry needs, improve the student experience, develop and implement a shared marketing initiative, establish a more efficient and effective centralized organizational structure, and develop better evaluation and assessment data. CGEP proposes that it requires additional resources to expand the impact and reach of the program to meet the needs of students and industry's demands for a rapidly increasing population of engineers working in Virginia.

SCHEV recommends that the funding should be split between general fund and nongeneral funds as is the current practice for CGEP funding at institutions. These funds should be allocated to the participating institutions; the combined match could be used to contract for the shared components of the program. With the estimated current splits across the participating institutions, the recommended amount is $208,000 general fund and $262,000 nongeneral fund for FY 2021 and $439,500 general fund and $553,500 nongeneral fund in FY 2022.

Agency initiatives

To meet additional demands and expectations in several units, SCHEV seeks additional funding to fill critical staff vacancies. SCHEV currently has five vacant positions. Additional funding to support one position in FY 2021 and another one position in year two will add to SCHEV's capacity to conduct additional analysis, increase reporting, provided additional policy development and improve program implementation. Staff members will help the agency meet the requirements of new and expanded activities, such as the increased requirements included in the six-year planning process, the implementation of the Tech Talent initiative, ongoing performance measurement, capital outlay planning, financial aid forecasting and monitoring, institutional collaboration and other areas.

In addition, as part of an effort to modernize submissions of materials to SCHEV, including program approvals, grants and other institution requests, SCHEV seeks funding to support of an online platform to reduce the administrative burden and improve the efficiency of managing requests.

The total requested to support agency operations is $466,900 for FY 2021 and $518,800 for FY 2022.

APPENDIX A: OPERATIONS ESTIMATES, BASE ADEQUACY CALCULATIONS AND FACULTY SALARY RANKINGS BY INSTITUTION

Operations Estimates

			2020-21					FY2022				
Institution	Total Resources[1]	Tier based on % of Pell Recipients	Increase Nonpersonal Cost 2%	O&M Request	Total Required Funding	GF Share of Funding	NGF Share of Funding	Increase Nonpersonal Cost 2%	O&M Request	Total Required Funding	GF Share of Funding	NGF Share of Funding
CNU	$81,419,000	15%	$301,000	$686,000	$987,000	$590,000	$397,000	$603,000	$1,372,000	$1,975,000	$1,181,000	$794,000
GMU	$611,185,000	btw 30-50%	$2,469,000	$910,000	$3,379,000	$1,835,000	$1,544,000	$4,949,000	$1,715,000	$6,664,000	$3,619,000	$3,045,000
JMU	$343,369,000	<20%	$1,542,000	$887,000	$2,429,000	$1,207,000	$1,222,000	$3,091,000	$887,000	$3,978,000	$1,977,000	$2,001,000
LU[2]	$75,053,000	btw 20-30%	$248,000	$1,538,000	$1,786,000	$1,547,000	$239,000	$498,000	$1,584,000	$2,082,000	$1,787,000	$295,000
NSU	$91,824,000	>50%	$287,000		$287,000	$167,000	$120,000	$575,000		$575,000	$335,000	$240,000
ODU	$314,951,000	btw 30-50%	$1,137,000	$970,000	$2,107,000	$1,288,000	$819,000	$2,279,000	$1,345,000	$3,624,000	$2,214,000	$1,410,000
RU	$135,082,000	btw 30-50%	$528,000		$528,000	$354,000	$174,000	$1,058,000	$0	$1,058,000	$709,000	$349,000
UMW	$80,598,000	btw 20-30%	$325,000	$421,000	$746,000	$467,000	$279,000	$651,000	$562,000	$1,213,000	$759,000	$454,000
UVA	$762,879,000	<20%	$2,044,000	$430,000	$2,474,000	$851,000	$1,623,000	$4,094,000	$601,000	$4,695,000	$1,615,000	$3,080,000
UVAW	$30,619,000	btw 30-50%	$75,000		$75,000	$50,000	$25,000	$149,000		$149,000	$100,000	$49,000
VCU	$662,108,000	btw 30-50%	$3,141,000	$790,000	$3,931,000	$2,095,000	$1,836,000	$6,298,000	$1,053,000	$7,351,000	$3,918,000	$3,433,000
VMI	$44,355,000	<20%	$165,000		$165,000	$68,000	$97,000	$332,000	$144,000	$476,000	$194,000	$282,000
VSU	$77,471,000	>50%	$277,000		$277,000	$152,000	$125,000	$555,000	$172,000	$727,000	$399,000	$328,000
VT	$810,134,000	<20%	$3,513,000	$2,344,000	$5,857,000	$2,243,000	$3,614,000	$7,043,000	$4,210,000	$11,253,000	$4,310,000	$6,943,000
W&M	$227,490,000	<20%	$829,000	$264,000	$1,093,000	$422,000	$671,000	$1,663,000	$1,448,000	$3,111,000	$1,201,000	$1,910,000
RBC	$14,358,000	btw 20-30%	$59,000		$59,000	$39,000	$20,000	$118,000	$113,000	$231,000	$154,000	$77,000
VCCS	$932,698,000	btw 30-50%	$3,934,000	$1,410,000	$5,344,000	$3,752,000	$1,592,000	$7,886,000	$768,000	$8,654,000	$6,076,000	$2,578,000
Total	$5,295,593,000		$20,874,000	$10,650,000	$31,524,000	$17,127,000	$14,397,000	$41,842,000	$15,974,000	$57,816,000	$30,548,000	$27,268,000
VIMS				$262,000	$262,000	$248,000	$14,000		$484,000	$484,000	$460,000	$24,000
VT-Ext				$710,000	$710,000	$674,000	$36,000		$1,331,000	$1,331,000	$1,265,000	$66,000
Total			**$20,874,000**	**$11,622,000**	**$32,496,000**	**$18,049,000**	**$14,447,000**	**$41,842,000**	**$17,789,000**	**$59,631,000**	**$32,273,000**	**$27,358,000**

Notes: (1) Based on 2020-22 institutions' activity-based budget.
(2) Additional adjustment provided to LU to reduce impact of higher O&M for buildings coming online in the upcoming biennium.

Estimated 2018-19 Base Adequacy/Cost of Education Funding

Institution	Calculated Need[1,2]	Available Resources[3,4,5]	% Funding to Guide	Funding Shortfall	GF Share	Incremental Funding		
						GF	NGF	Total
CNU	$71,084,000	$82,280,000	116%		59.8%			
GMU	$544,322,000	$621,311,000	114%		49.9%			
JMU	$303,348,000	$340,270,000	112%		49.6%			
LU	$68,990,000	$75,661,000	110%		61.8%			
NSU	$65,446,000	$84,615,000	129%		50.3%			
ODU	$316,917,000	$321,263,000	101%		55.8%			
RU	$126,450,000	$134,646,000	106%		61.0%			
UMW	$66,891,000	$80,939,000	121%		60.1%			
UVA	$622,349,000	$767,047,000	123%		32.2%			
UVAW	$24,815,000	$30,551,000	123%		59.8%			
VCU	$608,673,000	$674,157,000	111%		49.8%			
VMI[6]	$32,989,000	$35,199,000	107%		40.8%			
VSU	$59,205,000	$70,648,000	119%		47.0%			
VT	$727,672,000	$817,929,000	112%		38.1%			
W&M	$175,642,000	$226,301,000	129%		38.6%			
RBC	$13,542,000	$14,352,000	106%		63.6%			
VCCS	$847,877,000	$910,403,000	107%		62.7%			
Total	$4,676,212,000	$5,287,572,000	113%		48.7%			
EVMS	$87,298,000	$82,925,000	95%	($4,373,000)	39.8%	$1,740,650	$2,632,350	$4,373,000
Grand Total	$4,763,510,000	$5,370,497,000		($4,373,000)		$1,740,650	$2,632,350	$4,373,000

Notes: (1) Based on projected FY19 student FTE and FY17-FY19 3-year average discipline credit hours.
(2) The blended salary is based on FY20 appropriated T&R faculty salary and FY20 FTE positions in ABB.
(3) Available resources are from FY20 ABB.
(4) GF adjustments are OCR funding at NSU and VSU, and VCCS central office (FY18 adjustment).
(5) NGF includes required funding for programs 101-40, 102 and 103 made in October 2009.
(6) Available resources are adjusted for "uniquely military" mission.

Faculty Salary Rankings by Institution and Recommended Salary Increases if the State Supports Increases

	2020 Faculty Salary Percentile Ranking to Peer Institutions	SCHEV Recommended Salary Increase Range if the State Supports Increases
CNU	35	3%
GMU	4	5%
JMU	36	3%
LU	46	2%
NSU	55	2%
ODU	25	4%
RU	26	4%
UMW	31	3%
UVA	34	3%
UVAW	81	2%
VCU	29	4%
VMI	30	4%
VSU	33	3%
VT	20	4%
W&M	24	4%
RBC	68	2%
VCCS	45	2%

APPENDIX B: FINANCIAL AID RECOMMENDATIONS BY INSTITUTION

In-State Undergraduate Need-based Aid

Institutions	Average unmet need under the funding model	FY 2019-20 allocations	FY 2020-21		FY 2021-22	
			Increase	Total funding	Increase	Total funding
CNU	$5,368	$5,947,167	$124,800	$6,071,967	$249,600	$6,196,772
GMU	$7,628	$28,046,653	$3,472,500	$31,519,153	$6,944,900	$34,991,616
JMU	$5,756	$10,529,775	$639,700	$11,169,475	$1,279,400	$11,809,192
LU	$6,542	$5,769,115	$393,700	$6,162,815	$787,400	$6,556,542
NSU	$6,662	$12,655,318	$816,100	$13,471,418	$1,632,200	$14,287,559
ODU	$6,966	$23,309,394	$2,668,500	$25,977,894	$5,337,000	$28,646,379
RU	$7,478	$10,715,455	$1,269,200	$11,984,655	$2,538,400	$13,253,821
UMW	$5,953	$3,660,129	$235,200	$3,895,329	$470,300	$4,130,368
UVA	$2,298	$6,805,819	$160,200	$6,966,019	$320,300	$7,126,131
UVA-W	$6,578	$3,204,335	$201,400	$3,405,735	$402,700	$3,607,042
VCU	$6,511	$31,770,902	$2,319,200	$34,090,102	$4,638,400	$36,409,337
VMI	$1,516	$1,118,218	$13,400	$1,131,618	$26,700	$1,144,925
VSU	$6,977	$9,147,820	$738,500	$9,886,320	$1,477,000	$10,624,838
VT	$5,706	$17,810,811	$811,600	$18,622,411	$1,623,200	$19,434,009
W&M	$1,548	$3,924,352	$66,500	$3,990,852	$133,000	$4,057,321
Four-year Total	**$6,601**	**$174,415,263**	**$13,930,500**	**$188,345,763**	**$27,860,500**	**$202,275,853**
RBC	$4,856	$1,306,180	$77,200	$1,383,380	$154,300	$1,460,491
VCCS	$2,862	$47,591,355	$1,135,500	$48,726,855	$2,271,000	$49,862,315
Two-year Total	**$2,883**	**$48,897,535**	**$1,212,700**	**$50,110,235**	**$2,425,300**	**$51,322,807**
Grand Total	**$4,920**	**$223,312,798**	**$15,143,200**	**$238,455,998**	**$30,285,800**	**$253,598,660**

Graduate Aid

2020-22 Graduate Financial Aid Recommendations

Institution	FY2020 Appropriations	FY 2021 Increase	FY 2022 Increase
GMU	$2,753,941	$53,400	$80,000
ODU	$2,710,695	$165,800	$248,600
UVA	$5,327,945	$222,800	$334,200
VCU	$3,424,984	$140,400	$210,700
VIMS	$321,002	$284,800	$427,200
VT	$5,077,625	$79,400	$119,300
W&M	$925,924	$53,400	$80,000
Totals	$20,542,116	$1,000,000	$1,500,000

APPENDIX C: HEETF FUNDING AMOUNTS AND ESTIMATED DEBT SERVICE PAYMENTS BY INSTITUTION

HEETF Current FY 2020 Appropriations

TABLE 1
Higher Education Equipment Trust Fund (HEETF)
(2019-20)

Institution	Traditional Allocation	Research Allocation	Total Allocation
GMU	$3,947,024	$474,407	$4,421,431
ODU	$5,016,192	$329,078	$5,345,270
UVA	$10,458,476	$5,189,341	$15,647,817
VCU	$6,853,430	$2,995,552	$9,848,982
VT	$10,331,639	$5,240,458	$15,572,097
W&M	$2,300,493	$595,857	$2,896,350
W&M-VIMS	$362,100	$175,307	$537,407
CNU	$754,464	$0	$754,464
UVA-Wise	$250,681	$0	$250,681
JMU	$2,309,646	$0	$2,309,646
LU	$743,433	$0	$743,433
UMW	$655,746	$0	$655,746
NSU	$1,200,108	$0	$1,200,108
RU	$1,744,993	$0	$1,744,993
VMI	$886,084	$0	$886,084
VSU	$1,342,189	$0	$1,342,189
RBC	$160,149	$0	$160,149
VCCS	$17,596,542	$0	$17,596,542
SWVHEC	$80,111	$0	$80,111
RHEA	$77,623	$0	$77,623
IALR	$274,172	$0	$274,172
SVHEC	$95,790	$0	$95,790
NCI	$34,486	$0	$34,486
EVMS	$524,429	$0	$524,429
TOTAL	**$68,000,000**	**$15,000,000**	**$83,000,000**

HEETF Recommended Allocations

TABLE 2
2020-22 Higher Education Equipment Trust Fund Recommended Allocation

	2020-21 HEETF Guidelines				2021-22 HEETF Guidelines			
Institutions	9-Year Cycle Annual Replacement Need	Computers	Research Initiative (1)	Grand Total	9-Year Cycle Annual Replacement Need	Computers	Research Initiative (1)	Grand Total
CNU	$696,700	$215,700	$0	$912,400	$696,700	$215,700	$0	$912,400
GMU	$4,013,900	$1,350,500	$760,500	$6,124,800	$4,013,900	$1,350,500	$760,500	$6,124,800
JMU	$1,792,900	$929,800	$0	$2,722,700	$1,792,900	$929,800	$0	$2,722,700
LU	$658,500	$193,500	$0	$852,000	$658,500	$193,500	$0	$852,000
NSU	$1,194,700	$210,200	$0	$1,404,800	$1,194,700	$210,200	$0	$1,404,800
ODU	$4,611,400	$845,500	$492,000	$5,948,800	$4,611,400	$845,500	$492,000	$5,948,800
RU	$1,729,500	$387,500	$0	$2,117,000	$1,729,500	$387,500	$0	$2,117,000
UMW	$501,700	$187,600	$0	$689,300	$501,700	$187,600	$0	$689,300
UVA	$16,354,500	$1,099,200	$7,317,500	$24,771,100	$16,354,500	$1,099,200	$7,317,500	$24,771,100
UVA-Wise	$383,800	$67,000	$0	$450,700	$383,800	$67,000	$0	$450,700
VCU	$8,514,400	$1,211,400	$3,901,100	$13,626,700	$8,514,400	$1,211,400	$3,901,100	$13,626,700
VMI	$1,015,500	$81,100	$0	$1,096,600	$1,015,500	$81,100	$0	$1,096,600
VSU	$1,155,300	$184,700	$0	$1,339,900	$1,155,300	$184,700	$0	$1,339,900
VT	$13,303,500	$1,576,700	$8,263,700	$23,143,700	$13,303,500	$1,576,700	$8,263,700	$23,143,700
W&M	$1,826,300	$371,100	$689,500	$2,886,800	$1,826,300	$371,100	$689,500	$2,886,800
W&M-VIMS	$321,700	$3,100	$761,400	$1,086,100	$321,700	$3,100	$761,400	$1,086,100
RBC	$128,000	$56,800	$0	$184,800	$128,000	$56,800	$0	$184,800
VCCS(2)	$18,192,000	$4,166,400	$0	$22,358,300	$18,192,000	$4,166,400	$0	$22,358,300
SWVHEC	$86,400	$0	$0	$86,400	$86,400	$0	$0	$86,400
RHEA	$65,900	$0	$0	$65,900	$65,900	$0	$0	$65,900
IALR	$223,000	$0	$0	$223,000	$223,000	$0	$0	$223,000
SVHEC	$216,700	$0	$0	$216,700	$216,700	$0	$0	$216,700
NCI	$75,500	$0	$0	$75,500	$75,500	$0	$0	$75,500
EVMS	$1,742,100	$0	$0	$1,742,100	$1,742,100	$0	$0	$1,742,100
TOTAL	**$78,803,900**	**$13,137,800**	**$22,185,700**	**$114,126,100**	**$78,803,900**	**$13,137,800**	**$22,185,700**	**$114,126,100**

(1) Additional funding provided for original Commonwealth Research Initiative (CRI) institutions.
(2) Includes $5 miillion additional recommendation to support Workforce development.

Estimated Debt Services Payments in FY 2022

TABLE 3
2020-22 Higher Education Equipment Trust Fund
Estimated Debt Service Payments(1)

Institutions	HEETF Estimated Debt Service	Research Initiative Debt Service (2)	Total Equipment
CNU	$135,600	$0	$135,600
GMU	$797,000	$117,500	$914,500
JMU	$404,500	$0	$404,500
LU	$126,600	$0	$126,600
NSU	$208,700	$0	$208,700
ODU	$810,700	$76,100	$886,800
RU	$314,600	$0	$314,600
UMW	$102,400	$0	$102,400
UVA	$2,593,000	$1,130,600	$3,723,600
UVA-Wise	$67,000	$0	$67,000
VCU	$1,444,900	$602,700	$2,047,600
VMI	$163,000	$0	$163,000
VSU	$199,100	$0	$199,100
VT	$2,210,700	$1,276,700	$3,487,400
W&M	$326,500	$106,600	$433,100
W&M-VIMS	$48,300	$117,700	$166,000
RBC	$27,500	$0	$27,500
VCCS	$3,321,700	$0	$3,321,700
SWVHEC	$12,900	$0	$12,900
RHEA	$9,800	$0	$9,800
IALR	$33,200	$0	$33,200
SVHEC	$32,200	$0	$32,200
NCI	$11,300	$0	$11,300
EVMS	$258,900	$0	$258,900
TOTAL	**$13,660,100**	**$3,427,900**	**$17,088,000**

(1) Assumes a 7-year period of debt service with the first payment made in the second year of the biennium. Estimated payments are based on the institutions' share of the recommended total allocation for 2020-21.
(2) Additional funding provided for original Commonwealth Research Initiative (CRI) institutions.