**2021 SIX-YEAR PLAN NARRATIVE (Part II)**

**INSTITUTION: Virginia Commonwealth University**

**OVERVIEW**

**The totality of the six-year plan should describe the institution’s goals as they relate to state goals found in the *Pathways to Opportunity: The Virginia Plan for Higher Education*; the Higher Education Opportunity Act of 2011 (TJ21); and the Restructured Higher Education Financial and Administrative Operations Act of 2005.**

**The instructions under institutional mission and alignment to state goals, below, ask for specific strategies, in particular related to equity, affordability and transformative outcomes. Other sections will offer institutions the opportunity to describe additional strategies to advance institutional goals and state needs. *Please be as concise as possible with responses and save this narrative document with your institution’s name added to the file name.***

**Section A. Pandemic Impact:** Briefly discuss, in one to two paragraphs, how the pandemic has impacted your institution. What things did your institution already have in place that proved helpful? What lessons were learned? What short-term changes have been made? What long-term changes will be made? What are the concerns moving forward?

**RESPONSE:**

At Virginia Commonwealth University (VCU), equity is the lens through which goals, objectives, and strategies are initiated and assessed. The pandemic along with the social justice reckoning over the past year has only reaffirmed the need for and value of students having access to and participating in equitable, affordable, and transformative learning opportunities, and, in response, VCU's faculty have exemplified the phrase *commitment to excellence in teaching and research*. [VCU implemented pandemic-related strategies](https://together.vcu.edu) based on information gathered from multiple institutional surveys and public health guidelines. Some of the short-term actions taken by VCU included:

* Building on VCU’s existing expertise and partnership with the VCU health system to quickly implement a comprehensive Public Health Response Team responsible for developing safety and health protocols.
* Shifting professional development resources embedded in VCU Online to quickly prepare faculty to create online course modules; testing new course formats such as “mini-mesters” that provide students flexible options.
* Working from our knowledge of how best to serve underrepresented students most at risk of attrition by moving student engagement and support services online and tripling student communications.
* Taking a student-centered approach to rapidly meet emergency financial needs by assessing and redesigning the emergency aid distribution and financial award process.

As VCU begins to transition back to a robust, in-person campus experience, assessments of short-term changes and the pandemic’s impact on equity gaps, financial need, students’ basic needs insecurity, and demand for flexible learning and working environments will continue. The post-pandemic environment will require that VCU continue to focus on ensuring robust alternative learning, student support, and working environments..

In many instances, the pandemic accelerated plans focused on these goals related to equity, affordability, and transformation. VCU must meet students where they are and ensure that their experiences, whether virtual or in-person, prepare them to be not only productive contributors but also leaders in their communities. The last year and a half also highlighted the unpredictability and ever-present threat of unprecedented emergencies that wield the power to upend day-to-day norms, future plans, and even funding models. VCU will need to continue to be nimble and explore options to prepare for unforeseen circumstances.

**Section B. Institutional Mission, Vision, Goals, Strategies, and Alignment to State Goals:** Provide a statement of institutional mission and indicate if there are plans to change the mission over the six-year period.

Provide a brief description of your institutional vision and goals over the next six years, including numeric targets where appropriate. Include specific strategies (from Part 3 – Academic-Financial Plan and Part 4 – General Fund Request) related to the following state themes and goals:

· **Equitable:** Close access and completion gaps. Remove barriers to access and attainment especially for Black, Hispanic, Native American and rural students; students learning English as a second language; students from economically disadvantaged backgrounds; and students with disabilities.

· **Affordable:** Lower costs to students. Invest in and support the development of initiatives that provide cost savings to students while maintaining the effectiveness of instruction.

· **Transformative:** Expand prosperity. Increase the social, cultural and economic well-being of individuals and communities within the Commonwealth and its regions. This goal includes efforts to diversify staff and faculty pools.

Strategies also can cross several state goals, notably those related to improved two-year and four-year transfer, and should be included here. If applicable, include a short summary of strategies related to research. The description of any strategy should be one-half page or less in length. Be sure to use the same short title as used in the Part 3 and Part 4 worksheets. If federal stimulus funds will fund activities and are included in Part 3 as reallocations, please note how they will be used.

**RESPONSE:**

**Mission**Virginia Commonwealth University and its academic health center serve as one national urban public research institution dedicated to the success and well-being of our students, patients, faculty, staff and community through:

* Real-world learning that furthers civic engagement, inquiry, discovery and innovation
* Research that expands the boundaries of new knowledge and creative expression and promotes translational applications to improve the quality of human life
* Interdisciplinary collaborations and community partnerships that advance innovation, enhance culture and economic vitality, and solve society’s most complex problems
* Health sciences that preserve and restore health for all people, seek the cause and cure of diseases through groundbreaking research, and educate those who serve humanity
* Deeply engrained core values of diversity, inclusion and equity that provide a safe, trusting and supportive environment to explore, create, learn and serve

The current strategic plan, VCU Quest 2025: Together We Transform provides guidance toward current and future priorities for the period 2019-2025.

**Vision Statement**As a preeminent national, urban, public university and academic health center, Virginia Commonwealth University will be distinguished by its commitments to inclusion, access and excellence; innovative and transformative learning; impactful research; exceptional patient care and beneficial community impact.

**Goals**VCU’s goals and strategies within Quest 2025 align with and embody the State of Virginia’s Pathway to Opportunity goals. They both recognize and celebrate the responsibility of higher education institutions to lift up all individuals with opportunities that cascade into communities, the Commonwealth, and our nation. They also bring into focus the sector’s responsibility to tackle systemic barriers to equity. VCU’s Quest 2025 goals fall under four themes that align with the Virginia Plan:

* Theme I: Student Success – Transform the lives of our distinctive and diverse student population through a university culture that supports every student’s success through inquiry, discovery, innovation, civic engagement and creative expression.
* Theme II: National Prominence – Distinguish VCU as a preeminent urban public research university by growing areas of strength as researchers, innovators and educators.
* Theme III: Urban and Regional Transformation – Mobilize VCU’s human capital and economic resources, collaborating with the community to address social and health inequities.
* Theme IV: Diversity Driving Excellence – Translate our value philosophy of diversity and inclusion into practices related to excellence and success.

Despite ongoing financial uncertainty, VCU’s commitment to Quest 2025 goals and alignment with the Virginia Plan is unwavering. The past year has magnified the scale of student financial need and underscored the urgency of addressing it through reform and the development of targeted, multifaceted innovations. During the pandemic, VCU learned the importance and value of advancing the university’s mission without hesitancy, even in the face of unprecedented circumstances. This approach is what VCU students not only need but also deserve. And while the accomplishment of these goals has resulted in a budgetary shortfall in FY2023, the university remains focused on ensuring that every person has the opportunity and access they need to fully participate in higher education experiences and celebrate both VCU’s partnership and their own agency in transforming their lives. This commitment and continued focus results in two significant general fund requests for the upcoming biennium: first, a request for FY2023 to address the shortfall that derives in part from the use of one-time funds to maintain momentum during the pandemic; and second, a more significant structural equity adjustment that will be used in part to address faculty salaries.

**Strategies**
VCU’s mission, vision, and goals enable us to thrive as a diverse and engaged institution that has placed access and excellence at the heart of all that we have done and ambitiously continue to accomplish. VCU strives to ensure a climate of mutual respect and trust where individuals of different cultural backgrounds, identities, abilities, and life experiences are embraced and empowered. The following strategies planned for the upcoming biennium celebrate the alignment of VCU’s goals and the State’s goals as we collectively embark upon an equitable, affordable, and transformative experience and outcome for those we serve.

**Student Recruitment & Retention (Priorities #1, #3, and #5)**To cultivate affordable post-secondary education pathways for all students (VA plan Goal 2), the university focuses on those for whom post-secondary education is not widely accessible. While VCU has made significant strides over the past several years in meeting students’ academic, social, and community needs, there is still a sizable gap between what we can and aspire to do to meet financial needs. Therefore, the university’s funding priorities that support recruitment and retention for the upcoming biennium will focus on principle areas:

**Undergraduate Need-based Financial Aid (Priority #1)**VCU is proud of the progress with closing achievement gaps, however, the university is acutely aware that innovative solutions centered around proactive and intentional intervention will not suffice to keep progress from stalling and gaps from widening. VCU continues to serve students in need of financial aid and also commits to their successful educational outcomes.

From Fall 2015 to Fall 2019, 12.6% more first-time full-time undergraduates received aid. In fact, there was a 50.5% increase over seven years (Fall 2013 to Fall 2019). The success of this investment by VCU is evidenced by the rising graduation rate for students who receive aid Students in the Fall 2014 freshman cohort who received financial aid had a 73.8% six-year graduation rate compared to 58.2% for students without financial aid. Further evidence of the importance of this aid is that VCU is closing the six-year graduation rate gap between Pell grant students and overall students (4 percentage point difference for the most recent rates). The FY2023 aid request of $8M reflects an annual aid increase of $4M for FY2022 and FY2023. In FY2022, this incremental aid was funded in part with one-time HEERF monies as part of the university strategy to sustain enrollment. An additional $4M increment is planned for FY2024. This aid will be allocated to serve a significant population of students with financial need. Among undergraduate financial aid recipients in the 2021 aid year, an estimated 56% are of low income and 33% are middle income (per the 2021 HHS poverty guidelines).

**Virginia Military Survivors & Dependents Education Program Waivers (Priority #1)**VCU’s close coordination with Virginia’s Department of Veteran Services has proven successful in working with veterans, active service members, spouses, and dependents to ensure a positive transition from military life to academics. Due to the expanded waiver eligibility under SB1173, VCU must provide additional funding to meet the needs of this population. Enrollment growth of nearly 190 students is estimated for the biennium with a total program cost to VCU of $6.7M (a permanent funding increment of $4M over current levels)

**Non-resident Recruitment and Retention (Priority #3)**VCU’s commitment to the education and success of the Commonwealth’s residents is unquestionable. Over 91% of first-time undergraduates enrolled at VCU (Fall 2019) were Virginia residents, the highest among the Tier III and R1 Virginia institutions. VCU continues to invest in these students and plans increased support to sustain and expand resident student financial aid. However, this approach can cause VCU’s student diversity to suffer when it does not seek to be competitive nationally. All students benefit when their community and those from which and with whom they learn are not from Virginia only.

VCU undertook a market analysis examining how best to grow enrollment among non-residents. While in the long term, VCU anticipates non-resident enrollment will become self-sustaining with a positive net financial outcome, in the short term, current non-resident rates are simply not competitive with highly-ranked programs at peer institutions such as University of North Carolina at Chapel Hill, Pennsylvania State University, Temple University, and Stony Brook University. VCU also has had little financial aid to offer to mitigate the significant sticker shock, even for programs such as the School of the Arts. private, highly-ranked institutions offer sizable aid packages to the best students.

To address this significant market shortfall, VCU began funding non-resident aid (from non-resident tuition) in 2019, offering $10,000 to $20,000 scholarships to students. To date, VCU has cobbled together one-time funding to support this initiative. As VCU confronts challenges to recruitment and retention in a post-pandemic environment, it is seeking to send a clear message advancing VCU as a highly competitive non-resident choice. This will require enhanced funding over the next biennium of approximately $8.3M.

**Ph.D. Student Health Insurance (Priority #5)**Among its R1 Virginia peers, VCU is the only institution that does not offer Ph.D. health insurance. Ph.D. students are often older and do not qualify for health insurance under their family’s plans. This leaves them with significant costs and uncertainty while taking on intense educational endeavors. VCU’s lack of support not only puts students at risk but also affects the university’s ability to offer equitable and affordable access to advanced training. Additionally, ensuring that VCU Ph.D. recruitment is competitive is an essential element for VCU’s transformative research program. The estimated $2.5M cost includes a partial subsidy for the students with the balance being paid for by the student or other means of support.

**Faculty Recruitment and Retention (Priority Ranking #2)**One of the ongoing challenges at VCU has been ensuring fair and equitable compensation for faculty members. The merit salary support provided by the State over the past several years has been greatly appreciated. However, similar salary increases among Virginia institutions have meant that VCU has not improved its relative position to R1 Virginia peers.

Based on the 2019-20 AAUP annual report VCU’s average salary for all full-time faculty is the lowest among all Virginia R1 peers. The difference between the highest average annual salary of a Virginia R1 and VCU is approximately $45,000. VCU is making two related requests to support faculty:

* To address the ongoing needs for faculty recruitment and retention, the university is including a 2% and 3% (FY2023, FY2024) merit increase
* To address the sustained challenge of salary equity, VCU is making a general fund request of $20M annually over the next three years (see general fund section). In FY2023, these funds will be allocated to adjustment strategies for adjunct faculty and faculty salary inequity.

In addition, funding is requested for faculty promotions and a 5% increase in adjunct rates. VCU requests an FY2024 increase of 3% to ensure competitive salaries for staff.

**School of Public Health (Priority Ranking #4)**COVID-19 has exposed an urgent need to improve public health infrastructure. Once the pandemic recedes, a wide range of threats will remain, which will require a more systemic approach to protect the nation’s health security. In response, VCU proposes establishing a School of Public Health (SPH). Minimal new infrastructure will be needed as VCU can leverage existing excellence in health research and teaching. The SPH should swiftly produce tangible benefits including attracting and retaining gifted undergraduate and graduate students and fostering high-impact collaborative research and education programs with partner universities. The Commonwealth will benefit from VCU graduates well prepared to immediately engage the State’s diverse populations.

The Virginia Plan identifies new pathways to opportunity as a primary goal. This aligns with the SPH as the programs will be designed to advance students whose interest is less in first professional or science-heavy outcomes and more on building careers fueled by their passion for advancing health, wellness, and equity in global, urban, and community settings. In contrast to other notable Schools of Public Health, VCU will focus on workforce development, elimination of longstanding healthcare disparities, and development of strategies to reverse the erosion of public confidence in science and highly effective public health interventions.

The minimal funding needed over the next biennium, ($1M per year) will be largely for personnel and support new undergraduate faculty, faculty support services, and school administration.

**General Fund Requests**

**FY2023 Shortfall (Priority Ranking #1)**As a continuation of the state’s FY2020 tuition initiative, the university kept access and affordability top of mind through FY2021 and FY2022, which marked a historic third consecutive year of zero percent rate change for undergraduate tuition. VCU also expanded this initiative to include graduate and first professional students. The institution enrolls 30.9% (Fall 2020) Pell-eligible undergraduate students and therefore fully realizes the importance of financial support in providing equitable access and the possibility of a college degree.

As noted in our introduction, this commitment to ensuring the ongoing momentum of our highest priorities has resulted in a budget shortfall for FY2022 and FY2023. VCU recognizes that the value of strengthening students’ future opportunities to pursue their passions, thrive, and be engaged contributors to and leaders in their communities far exceeds costs to VCU. Overcoming an accumulated shortfall in FY2022 was possible in part from difficult budget reductions (cumulatively FY2020, 2021 of $29M), one-time external funds (Health Plan holiday FY2020, HEERF funding FY2021 and 2022), and substantial withdrawals from VCU reserves. The budget as developed for the upcoming biennium results in a $30M shortfall. General fund support of $15M per annum is requested to address the structural shortfall including:

* Faculty salary increase ($2.6M)
* School of Public Health ($1M)
* VMSDEP Waivers ($4M)
* Undergraduate Need-based Financial Aid ($7.3M)

**FY2023 and 2024 Equity Adjustment (Priority Ranking #2)**In addition to the request from the state to alleviate the $15M financial commitment that VCU has taken on in service to students, VCU is also requesting a structural adjustment to support the continued advancement of the aforementioned critical and equity-driven goals with resources equitable to those at other Virginia R1 institutions.

VCU plays an important and unique role within the Commonwealth, offering a comprehensive array of programs across its schools and colleges. Of particular note are the university’s health sciences programs including Dentistry (the only program in the state), Pharmacy, Medicine (with its integrated medical center land practice plan, one of only two in the state), Nursing, and Health Professions. These highly ranked programs are also the home of prominent and innovative cross-collaborative research with VCU Massey Cancer Center and VCU Health.

Adequate funding is required to support these distinctive first professional programs and the opportunities they bring to the Commonwealth, but this should not come at a significant cost to the balance of the university and non-general funding sources needed to support other important areas. The size and scope of this funding issue has become clear as the university has advanced its own cost allocation model (underpinned largely from the base adequacy model). The pandemic further highlighted both the urgency of maintaining Virginia’s most robust health sciences campus and the resulting financial cost--something that is only feasible with adequate state support. A preliminary analysis of state support per resident FTE seems to indicate that VCU funding matches that of Virginian R1 institutions (VCU gross state funds per FTE = $8,101 vs R1=$7,483), however, this tells only part of the story as it does not differentiate between program offerings across institutions. A more accurate accounting of the per FTE funding is illustrated in the chart above where both first professional FTEs and allocated state funding are removed for all institutions (VCU & UVA). This more comparable analysis makes it clear that VCU receives significantly less funding than its peers. Funding per resident FTE for VCU = $4,412 while average funding for the R1 = $7,310. An investment by the state of $65M would be required for VCU to be funded equitably with the other Commonwealth R1 institutions.

To address this inequity VCU requests a three-year baseline adjustment of $20M annually. The initial request would address the underfunding of faculty salaries and would require $32M to match Virginia’s current R1 median salary levels. In addition, VCU will adjust staffing of adjuncts to meet comparable levels among other peer institutions.

**Massey Cancer Center (Priority Ranking #3)**To meet the growing need for advanced cancer research in the Commonwealth, VCU Massey Cancer Center requests $2.5M for the biennium. The cancer center leverages the state’s investment to produce a strong return, generating $37.4 million in research grants awarded to Massey researchers in fiscal year 2020 and $14.9 million in philanthropy received so far in fiscal year 2021. Increased state funds will improve the lives of Virginians and attract some of the best and brightest minds to our communities, further building Virginia’s reputation as a center for innovation and national collaboration and catalyzing economic growth.

Massey is among the top 4% of cancer centers nationwide and is one of only two cancer centers in the state designated by the National Cancer Institute. As Massey seeks to elevate its designation to Comprehensive status in 2022, which would be a first for the Commonwealth, state support will be critical to its efforts These dollars will help Massey demonstrate an added depth and breadth of research as well as substantial transdisciplinary research when seeking Comprehensive designation. Funding supports researchers translating their discoveries into clinical trials that improve patient care for all Virginians; adds critical personnel to support clinical and prevention research infrastructure; creates more jobs for Virginians; and expands Massey’s clinical trials network to bring the latest therapies to the entire state and to address cancer disparities in Virginia’s minority and vulnerable populations.

State funding also supports Massey’s efforts to address cancer disparities – an equity imperative driven by Massey’s unique catchment (service) area, which includes 66 localities with 41% of residents identifying as racial/ethnic minorities and 52% identifying as living in rural areas. Massey is leading the nation in establishing a 21st-century model of equity for cancer research and care, in which the community is informing and partnering with Massey on its research to best address the cancer burden and disparities of the communities the cancer center serves.

**Research Institute for Social Equity (RISE) (Priority Ranking #4)**Created in Fall 2020, the Research Institute for Social Equity (RISE) within the L. Douglas Wilder School of Government and Public Affairs at VCU serves as a vehicle to advance racial equity and social justice through multidisciplinary scholarship, research, training, and engagement. The goal of RISE is to be the national leader in advancing social justice to inform public policy, governance, and practice to improve conditions for marginalized voices within our society, including communities of color, LGBTQIA individuals, people with disabilities, incarcerated populations, survivors of domestic violence, and women.

Since its inception, RISE has worked with the Virginia Department of Emergency Management and the Health Equity Taskforce to assist in addressing equitable COVID-19 vaccine distribution and vaccine hesitancy as well as assessing citizens' views about COVID-19 through public opinion polling. RISE is currently working with the Virginia Department of Education to address equity barriers to teacher licensure in Virginia. VCU requests $5M in general fund support to expand this equity work.

**Section C. In-state Undergraduate Tuition and Fee Increase Plans: Provide information about the assumptions used to develop tuition and fee information the institution provided in the Excel workbook Part 1. The tuition and fee charges for in-state undergraduate students should reflect the institution’s estimate of reasonable and necessary charges to students based on the institution’s mission, market capacity and other factors.**

**RESPONSE:**

**Resident Tuition Assumptions:**Each year,VCU develops a multi-year, multi-fund financial plan for tuition rate setting based on expense and revenue growth. The plan for FY2022 through FY2024 included several key assumptions:

* VCU will only advance the most essential and strategically critical goals, including financial aid and competitive compensation.
* The university maintains enrollment expectations, eventually reaching Quest 2025 goals
* VCU will require funding to meet essential operational costs. In some areas, such as library costs, growth in 2023 and 2024 reflects catch-up after several years of budget reductions and/or flat budgets .

The resulting rates for undergraduate tuition will increase by 5% and 4% respectively in FY2023 and FY2024.

**Section D. Tuition and Other Nongeneral Fund (NGF) Revenue: Provide information about factors that went into the calculations of projected revenue, including how stimulus funds may mitigate tuition increases.**

**RESPONSE:**

**Total Tuition and NGF Assumptions**

* Graduate tuition rates will increase by 5% and 4% respectively.
* First Professional tuition rate increase will be between 2-3% due to variations in professional programs.
* Course fees were replaced in FY2020 with simplified (and lower) annual program fees. Currently there is no assumption in growth of program fees or E&G mandatory fees as the programming and costs will continue to evolve post-pandemic.

**Section E. Other Budget Items:** This section includes any other budget items for which the institution wishes to provide detail. Descriptions of each of these items should be one-half page or less.

**RESPONSE:**

**O&M for New Facilities - Science, Technology, Engineering and Mathematics (STEM) Building**
This 167,399 gross square foot project was approved with Item C-48.10 of Chapter 854, 2019 Acts of Assembly. Slated to open in January 2023, the new building will house labs, classrooms, and office space for the College of Humanities and Sciences. It will increase lab availability, facilitate innovative and flexible teaching methods, provide students with instructional and study spaces, and release space in other College of Humanities and Sciences buildings to better serve students and faculty. The estimated O&M cost is $.832M with $.416M required in FY23 and the balance of $.416M required in FY24.

**Library enhancement**One of the hallmarks of any high research institution is access to scholarly journals. VCU proactively manages journal subscriptions to reduce FY2021 costs by suspending and capping price increases. Barring subscription cancellations, prices are anticipated to increase approximately 3% ($.354M) annually for the next biennium.

**Utility Cost Increases**

The Division of Administration seeks improvements in operations and efficiencies across multiple campus-wide programs to reduce costs in facilities and services. However, improving and maintaining VCU’s considerable infrastructure requires a sustained resource investment simply to keep pace with inflation and mandated contractual increases. VCU is implementing an energy performance contract to identify relevant Energy Conservation Measures (ECMs) to reduce energy consumption in campus buildings and mitigate utility cost increases. Anticipated increases total $.406M in FY2023, with an additional $.211M in FY2024.

**Nongeneral Fund for Current Operations (Safety & Security; Fringe Benefits)**

Contractual cost increases are anticipated related to facilities operations, safety and security as well as technology. These contracts address a variety of issues including maintenance of systems (e.g HVAC, generators), safety and risk management (increased vendor cost for inspection and testing of fire suppression systems throughout the campus), operating and maintenance services, and custodial services. A conservative growth estimate for the various contracts has been assumed for planning purposes. The total cost increase is estimated at $.943M annually in 2023 and 2024.

Fringe/health benefit cost increases are assumed to be 0% in 2023 and 2024 in conjunction with planned salary increases.

**Section F. Enrollment Projections:** Include in this section information about how your institution developed its enrollment projections, whether your institution is concerned about future enrollment trends, and, if so, what planning is underway to address this concern. How have enrollment plans been impacted by the pandemic? For example, does your institution plan on enrolling more online students?

**RESPONSE:**

VCU generates granular enrollment projections for the next academic year for subpopulations of students based on class level, college of primary major, and residency. To project continuing degree-seeking enrollment, the university calculates projected retention rates based on the most recent three-year moving average of Spring-Fall retention rates for each population. These projected retention rates are applied to each subpopulation of current students, yielding granular enrollment projections for continuing students for the next academic year. To project new degree-seeking students, including new transfers, VCU calculates a three-year moving average of new student matriculations by class level, college, and residency; these averages form the basis of new student projections. Over the course of the admissions cycle for the upcoming academic year, Strategic Enrollment Management and Student Success (SEMSS) regularly reviews application volume and admissions yield for each subgroup. SEMSS uses these data, along with expert judgment, to adjust new student projections as needed. Continuing and new student projections are aggregated to generate a university-level forecast. VCU’s enrollment planning considers workforce development needs among a diverse spectrum of students including those who are traditional age. Planning also focuses on diversifying enrollment through increasing adult and graduate students.

Enrollment projections for subsequent academic years (two years out, and beyond) are generated by combining time-series forecasting with university strategic goals. For these years, VCU generates projections for continuing students by applying historic retention rates to expected subpopulation sizes. Projections for new, incoming students for upcoming years are generated by taking: (1) projected subpopulation retention rates, (2) projected number of continuing students for each subpopulation, and (3) the university’s 6-year enrollment goals, and “solving” for number of new, incoming students needed to achieve those goals.

With respect to possible pandemic effects on enrollment, the primary concern with the process described above was that its reliance on historical data (as opposed to contemporaneous data) would make it poorly-suited to dealing with exogenous shocks such as COVID-19. To inform enrollment planning due to the pandemic, VCU deployed a survey in March 2021 to students asking about their willingness and readiness to attend classes in the Fall based on two health scenarios: 1) slow administration of vaccinations and rising COVID-19 positivity rates, 2) a more favorable health situation wherein vaccination administration was on the rise and positivity rates were on a decline. The information gained from survey respondents was used to plan for a safe and vibrant campus in the upcoming Fall semester.

As noted in the response to the Pandemic Survey and in the evaluation section below, the pandemic accelerated the shift from individual course conversion to a focus on creating more online programs. VCU Online is currently on track to add at least six programs over the biennium, which will help build a model for successful online program offerings.

**Section G. Programs and Instructional Sites:** Provide information on any new academic programs, including credentials and certificates, new instructional sites, new schools, or mergers supported by all types of funding, that the institutions will be undertaking during the six-year period. Note that as part of the revised SCHEV program approval process, institutions will be asked to indicate if a proposed new program was included in its six-year plan. Also, provide information on plans to discontinue any programs.

**RESPONSE:**

VCU’s primary guide for comprehensive academic planning is Quest 2025, the strategic priorities, and the four themes therein: 1) student success; 2) national prominence; 3) collective urban and regional transformation; and 4) driving diversity excellence. Moreover, as a community-engaged, research intensive university, our strategic priorities include but are not limited to:

1. Developing creative technological and analytical improvements and evidence-based educational approaches to society’s problems to serve the needs of individuals and communities.
2. Enrich lives and elevate human understanding and aspirations through cultural contributions and critical analysis.
3. Reducing the burden of disease and improving wellness through transformative basic, translational, clinical and population research.
4. Improving health outcomes by leveraging emerging technologies, data science, machine learning and mathematical modeling.
5. Generating new medications, biologic treatments, interventions, devices and vaccines by actualizing discoveries made at VCU.
6. Creating environmentally and economically sustainable materials, products, processes and infrastructure.

VCU uses the aforementioned themes and priorities to determine specific academic initiatives and proposed new degree programs and certificates. First, in the area of academic initiatives, VCU has developed the following: transforming the undergraduate curriculum to ensure we offer a 21st-century learning experience; advancing innovations for high-quality education and workforce development; building and sustaining the infrastructure to enhance diversity, inclusion to support teaching, research, scholarship, creative expression, and service; and creating a university culture that supports and promotes VCU’s interdisciplinary research strengths, scholarship and creative expression.

Each of VCU’s schools and colleges is planning to strengthen existing and/or to advance new programs in critical domains and fields that will benefit the Commonwealth of Virginia. Domains and fields include but are not limited to: manufacturing; sustainability; environment; computing; biotech; health inequities; population health; public health; metamorphic technology; community-centered engagement; arts; brand strategy and design; finance; leadership; education (e.g. TESOL; educational psychology); cancer research; cardiovascular research; neuroscience; nursing and academic nursing education; pharmaceutical sciences; pharmaceutical engineering; social equity; public policy and public affairs; bioscience; chemical biology; communications; critical studies in social justice; data science; English; health science; political science; Spanish; prosthodontics and digital dentistry; and oral biology. Recent new academic programs demonstrate VCU’s successes. Examples include the doctoral degree in pharmaceutical engineering, which was approved in 2019 and is the first in the nation (Quest 2025 theme: national prominence), and the Fundamentals of Computing baccalaureate certificate, approved in spring 2020, which builds on the Greater Washington Partnership CoLab digital badge (Quest 2025 theme: collective urban and regional transformation).

In the context of prior successes and future plans, VCU is committed to serving a diverse student population. The university will enhance this service by offering degree completion programs along with traditional programs in online delivery formats to better serve the needs of adult learners.

**Section H. Financial Aid:** Discuss plans for providing financial aid, not including stimulus funds, to help mitigate the impact of tuition and fee increases on low-income and middle-income students and their families, including the projected mix of grants and loans. Virginia’s definitions of low-income and middle-income are based on HHS Poverty Guidelines. A table that outlines the HHS guidelines and the definitions is attached.

**RESPONSE:**

VCU as a leader in best practices in addressing financial barriers for students. Colleges and universities must develop a more holistic approach to addressing student financial need, as college affordability is more than the amount of money awarded to students through financial aid. Institutions must seek new ways to meet the diverse financial need of today’s students and to ensure that programs and policies are evolving alongside evolving student populations. VCU’s overall financial aid strategy is proactive and student-focused. As FY2019-2020 data demonstrates, VCU student financial need is among our highest priorities:

* Over half of all undergraduate degree-seeking students (60%) at VCU are recipients of grants and scholarships.
* 75% of the institutional need-based grants went to low income students (includes Pell Eligible), and 25% went to non-Pell eligible students.
* The 2019-20 average grant to low to middle-income undergraduate students was $3,140.
* The median expected family contribution for undergraduate grant recipients was $1,135 toward a $31,697 cost of attendance.
* Unmet need for all students submitting the FAFSA, including Pell-eligible, amounted to $189 million.

The Office of Financial Aid places a major emphasis on responding in real-time to impediments to accessing and securing aid as well as testing strategies to maximize the impact of limited financial aid funding on student success. The pandemic has been especially challenging as it brought about both sudden and urgent growth in student financial need as well as new but relatively short-lived federal funds. As VCU moves to a post-pandemic setting, ensuring that available funding truly works for students will become even more important. Some of the initiatives underway or planned for the upcoming biennium include:

* Increase student empowerment and financial literacy – Add dedicated course time and materials focused on financial literacy in introductory courses. Create an online net price calculator and eliminate most course fees. Integrate dedicated financial counselors through the Student Financial Management Center with VCU student success and counseling services.
* Maximize financial aid funding – Test a new need-based grant model for Program 108 funds in anticipation of forthcoming regulatory changes to the Virginia Student Financial Assistance Program (VSFAP). Create a student-accessible database of restricted scholarships to encourage student-initiated applications. Enhance collaboration with university fundraising to identify funding to address student balances ineligible for aid.
* Proactively intervene – Add financial aid metrics to the Student Academic Progress measures to reduce the impact of financial issues on student retention. Significantly advance financial aid packaging (moved to January) and verification to allow incoming students to determine aid eligibility well prior to admission. Create a mobile-friendly emergency aid application form to speedily award federal funds. Implementation of a chatbot to provide real-time responses to student financial questions.

VCU has fine-tuned awards to target particular student needs and encourage performance. In FY2021, approximately $28M of aid was for high need or high need and merit, $6.7M for transfer students, and an additional $4.8M for those students who may not be Pell-eligible but who still need aid, including middle-class students. For the 2021 aid year, an estimated 56% of undergraduate financial aid recipients were low income and 33% were middle income.

**Section I. Capital Outlay:** Discuss the impact, if any, that the pandemic has had on capital planning, such as decreasing the need for space or other aspects. Provide information on your institution’s main Education and General Programs capital outlay projects, including new construction as well as renovations that might be proposed over the Six-Year Plan period that could have a significant impact on strategies, funding, student charges, or current square footage. Do not include projects for which construction (not planning) funding has been appropriated. *Special Note: The requested information is for discussion purposes only and inclusion of this information in the plans does not signify approval of the projects.*

**RESPONSE:**

The short and long-term impacts of the pandemic on space utilization are being evaluated from audits conducted via our annual space utilization survey and other pandemic-related changes, including the likelihood of ongoing flexible work arrangements for staff.

**Arts and Innovation Building**
Collaboration is the driving force of next-generation teaching, learning, and discovery at VCU. A new Arts and Innovation Building, in close proximity to the Institute for Contemporary Art and steps away from local startups, will provide a launchpad for critical digital and creative economy initiatives. A new building will optimize VCU’s top-ranked arts innovation programs by bringing many of them together under one roof. In the same way a hospital is a classroom for medical students, the new Arts and Innovation Building will offer hybrid classroom-laboratories, interdisciplinary performance and makerspace, and creative incubators for rapidly growing partnerships across arts, business, medicine, and engineering. Here, students will learn to harness their abilities and prepare for a world of new and emerging industries. The location is one of the highest traveled city intersections, and a completed arts corridor creates an inviting front door to VCU’s campus.

**Interdisciplinary Academic and Laboratory Building**
A new Interdisciplinary Academic and Laboratory Building is mission-critical for VCU and will relieve capacity issues surrounding on-campus lab and class space. Located on Linden Street in the heart of VCU’s Monroe Park Campus, the building will provide more than 204,000 square feet of modern classroom and lab space and serve as a significant contributor to discovery and innovation. Classes and labs in VCU’s Temple Building and Oliver Hall will relocate to the new site, making it possible to demolish, renovate and repurpose older campus buildings and spaces and make way for iconic green space, designed to highlight the university’s unique urban setting and rich history.

**Dentistry Building**
A new Dentistry Building will replace two outdated facilities (Lyons and Wood) and free up precious acreage, allowing for growth and much-needed central green space. A new facility for the School of Dentistry, the only school of its kind in the Commonwealth, will offer students higher quality learning spaces through a modern and efficient layout and design. It will also eliminate the multimillion-dollar cost and inefficient deferred maintenance needs of current facilities. In addition to supporting clinical productivity, this new facility will allow VCU School of Dentistry to maximize care for underserved populations. Research conducted as part of the ONE VCU Master Plan shows that well-designed health care facilities also enhance safety and healing to improve the overall patient experience.

**Section J. Restructuring:** Provide information about any plans your institution has to seek an increased level of authority, relief from administrative or operational requirements, or renegotiation of existing management agreements.

**RESPONSE:**

Thank you for the opportunity to provide concerns/issues or to request clarification on items within VCU’s existing Tier III authorities. VCU would be pleased to reopen a dialogue with state stakeholders from both the executive and legislative branches and fellow Tier III institutions to discuss the following opportunities. Please note these suggestions to improve institutional efficiency are framed through a student affordability perspective especially during difficult economic times.

* Improve administrative effectiveness in the Office of Procurement Services.
	+ Allow for fully local (institutional) administration of the Small Purchase Credit Card program and direct receipt of rebates. Note this should not impact the program's ability to negotiate lower costs but would reduce administrative overhead related to sponsored funds as well allowing for greater card utilization.
	+ Develop a flat fee structure for the Commonwealth’s e-procurement solution (eVA) to increase fee transparency, reduce duplicate data production and allow for improved use of local enhanced procure to pay systems.
	+ Revisit high frequency transactional posting in eVA and eliminate the requirement to post business opportunities, solicitations, and sole-source purchases. Transparency and visibility could be enhanced by linking to postings on local institutional sites.
* Fully realize the benefits of robust institutional HR systems.
	+ Allow institutions and their employees to fully realize the benefits of institutional HR systems by permitting the consolidation of all employees into one system (82% of staff at VCU are in the VCU staff program).
	+ Reduce institutional and state administrative burdens.
		- exempting institutions from DHRM reporting on activities covered by the management agreement (i.e. performance management scores),
		- Eliminate required reporting that only applies to classified staff. Given the decreasing number of classified staff (VCU no longer recruits classified staff) required reports such as the annual Succession Report and annual Employee Opportunities Plan are no longer meaningful. VCU will, of course, continue its strong internal efforts and commitment to succession development and outreach to diverse candidates, both efforts core to VCU's values.
		- Abolish the VCU agency portal in the Commonwealth of Virginia Knowledge Center and, excuse VCU from requirements to use the system.
	+ Enhance state training by providing state training modules in formats readily hosted in VCU’s Talent@VCU Learning Management System.
* Enhance financial predictability and improve operational efficiency.
	+ Remove the requirement to escrow interest earnings on tuition balances.
	+ Move to a true sum sufficient non-general fund appropriation, where non-general fund appropriation is simply equal to non-general fund activity. Eliminate appropriation, allotment, and approval actions related to all non-general funds (including but not limited to tuition and fees, auxiliary revenues, and sponsored research activity).

**Section K. Evaluation of Previous Six-Year Plan:** Briefly summarize progress made in strategies identified in your institution’s previous six-year plan. Note how additional general fund support and reallocations were used to further the strategies.

**RESPONSE:**

VCU made significant progress on the strategies identified in the 2019 six-year plan. Then, as now, VCU’s goals align with the Virginia Plan, and they have long been at the core of the university’s mission, vision, and values.

**Student Access and Affordability**

**Enhance SEMSS, Open & Affordable Course Content, Undergraduate Need-based aid**

VCU is committed to addressing structural inequities to ensure student success and has made affordability and improved financial counseling and support an institutional priority. One of the primary strategies in the 2019 plan focused on maximizing the impact of scarce resources by reorganizing student services within the Division of Strategic Enrollment Management and Student Success (SEMSS). In Spring 2020, the Student Financial Management Center (SFMC) officially launched with a mission of providing students with timely, accurate information about their finances. Financial counselors work with students one on one, creating a holistic, supportive experience. VCU signed a contract with QLess to create a virtual line, known as *RamQ*, which enables students to join the in-person line from anywhere. VCU also launched a dedicated office for adult learners and non-traditional students, which cultivates post-secondary education pathways. Financial Aid and Scholarships has partnered with the new office to ensure VCU is addressing their specific financial barriers.

As part of a strategy to both recognize the full cost of attendance and optimize scarce student resources, VCU has continued to expand an initiative to create open and affordable course content. Through FY2021, after successfully hiring a dedicated librarian, the number of students benefiting from the program grew to 45,000, had over 300 faculty participants, and resulted in a savings of $4.3M.

The success of this investment is evidenced by the rising graduation rate for students who receive aid. Students in the Fall 2014 freshman cohort who received financial aid had a 73.8% six-year graduation rate compared to 58.2% for students without financial aid.

**Institutional Support to Optimize Student Success**

VCU is particularly proud of the innovative initiatives focused on advancing student success that were implemented over the past biennium. The 2019 Plan highlighted work around student support, changes in course design and delivery, and support for faculty.

**Student Success**Career and academic advisors focused their attention on students most at risk of leaving the university by deploying outreach campaigns and programming designed to both engage and guide them to resources. VCU expanded its college and career success suite of courses (UNIV courses), in part due to an established correlation of higher retention rates for students who enroll in those courses. Overall, enrollment in these courses adds between 2% and 4% to the probability of one-year retention. Even more notable was that among students who finished their first semester on academic warning, completion of UNIV102 added 17% to the probability of one-year retention. Positive effects on retention for certain subpopulations were even greater, for example, students who matriculate without a declared major, Men of Color, Women of Color, etc.

A particular focus for VCU’s career advisers has been to help students find paid opportunities, be it a job or internship. Last year, VCU maximized its Federal Work-Study (FWS) allotment for the first time in recent history.

In addition to successes with UNIV courses and FWS placements, VCU has documented a positive relationship between students who met with advisors and their grade outcomes. Funding was invested over the past biennium with the goal of keeping advising ratios below 300 or 250:1 to further enable advisors to proactively reach out to students who have academic alerts and/or unsuccessful course grades.

**Curricular innovation of General Education and Course Redesign**One of VCU’s strategies for student success focused on curricular improvements to the GenEd30 model, which included embedding six learning outcomes to strengthen students’ academic and career readiness skills. In addition, VCU began work focused on significant course redesign, including the utilization of web-based learning assistance. While the pandemic slowed some progress in this area, it did allow for robust testing and eventual selection of optimal tools for math and chemistry coursework.

For example, the Pre-Calculus courses are moving to the [POGIL](https://pogil.org/educators/resources/high-school-resources?gclid=Cj0KCQjwzYGGBhCTARIsAHdMTQwVpZ0dJ933B3viOkxiBQZLNFwCOWqQHv35SUosZVL4WTg5RklsQnEaAtBvEALw_wcB) instructional model, which has been used in the course redesign model for Chemistry 101. POGIL is a national model for problem-based and collaborative learning in STEM. In addition, VCU has recently been selected as one of the very few institutions to participate in the Association of American Colleges & Universities STEM training in July 2021. We have included the lead faculty member from the Pre-Calculus course in this training to take place in Summer 2021.

**Reduce Class size for foundational courses**As a part of curricular changes, VCU also pursued a strategy to reduce class size for foundational courses. This strategy, which reduced maximum class size by over 10%, increased time for faculty to engage with students, support individual student learning, and strengthen student-faculty relationship building. It also brought VCU into compliance with the professional standards set by the Conference on College Composition and Communication, which calls for writing-intensive first-year courses to have ideally 15 and no more than 20 students in each section. VCU will continue to monitor the benefits of this strategy as courses move to a more normalized environment.

**Expand Online**In the Fall of 2019, VCU and Noodle Partners entered an agreement to launch the Masters of Social Work (MSW) and Masters of Arts Homeland Security and Emergency Preparedness (HSEP). Both programs have grown significantly with in-state students, starting with 24 enrolled students for both programs in Fall 2019 to a recent total of 352 cumulative enrolled students in the Spring 2021 semester. As a result of strong student interest and positive faculty feedback, VCU Online has realized the importance of taking a programmatic approach. As VCU moves into the new biennium, VCU Online has shifted from individual course development to high market demand program development. The extraordinary demands made of VCU Online during the pandemic also led to a shift from ad-hoc faculty assistance to full-scale professional development.

**Enhance DEI**The year 2019 marked a significant growth period for the Institute for Inclusion, Inquiry, and Innovation (iCubed). Of the nine visiting scholars brought to VCU, all were offered faculty positions across VCU’s colleges, schools, and units including College of Humanities and Sciences, School of Education, School of Social Work, VCU Life Sciences, and VCU School of the Arts. iCubed is also home to the Commonwealth Scholars (CSP) program - a research mentorship program that matches college students who are of the highest need and highest talent, with exceptional research faculty who specialize in inclusive community-engaged research. Since 2019, iCubed has ushered two cohorts of approximately 14 students each through the CSP program.
 **Faculty Recruitment and Retention, Competitive Staff Salaries**Salary increases as a result of state-mandated salary actions occurred in FY2020 and FY2022. In addition, the university increased the minimum for teaching adjuncts to $1,100 per credit hour and funded a 4% merit increase for adjuncts in FY2020. In FY2022, this will be again increased by 5% with minimum pay increasing to $1,200 per credit hour.

For all Teaching and Research Faculty (T&R), VCU has seen gains in one-year retention rates. VCU has retained T&R faculty from Fall 2017 to Fall 2018 at a rate of 89.8%. VCU increased the one-year retention rate to 91.5% for the Fall 2019 rate. With regard to recruitment, VCU has made significant strides with recruiting diverse T&R. From Fall 2019 to Fall 2020, VCU increased Black/African American T&R faculty by 7.3% and Hispanic/Latino T&R faculty by 12.3%. Over five years (since Fall 2016) those increases were 46.7% for Black/African American and 34.4% for Hispanic/Latino.

**Commonwealth Impact**

**REAL**VCU’s Relevant, Experiential, and Applied Learning (REAL) initiative has made significant progress in developing an accurate and holistic view of engagement and participation gaps. A REAL data dashboard was recently implemented to visualize participation rates by activity type, unit, and demographic. Findings are quickly translating into new strategies to ensure that students have equitable access and opportunity to participate in work-based learning.

VCU’s work has recently been recognized through several grant awards, which is enabling REAL to pilot innovative programs designed to increase high-quality paid internships and structured networking opportunities. Examples include a regional collaborative effort with ChamberRVA and a partnership with VCU’s da Vinci Center that seeks to provide 21st-century skills in innovation and entrepreneurship to first-generation and low-income students while simultaneously improving access and equity in the local entrepreneurship ecosystem. Growth in these areas provides traditionally excluded and underserved students with valuable social capital and makes internship participation more accessible for students who often must choose to engage in paid jobs over academically relevant experiences in order to meet their basic needs, including food and housing.

REAL has also made progress by offering internal grants. REAL grants support faculty, programs, departments as they seek ways to mitigate obstacles and increase access to transformative, high-impact experiential learning opportunities both in and beyond the classroom. The outcomes from these grants have the potential to not only transform the student learning experience but also transform future trajectories and re-write the narrative for many of our students.

**VCU da Vinci Center**The VCU da Vinci Center has continued to grow and now serves more than 300 undergraduates through its certificate programs and courses. Academic offerings develop students anchored in one discipline with the capacity and openness to span across several. The da Vinci Center’s partnership with REAL connects students with local, regional, and national networks that prepare them to be entrepreneurs and leaders in innovation.

The da Vinci Center focuses on fostering an inclusive and diverse environment where students who are often excluded from the entrepreneurship ecosystem are embraced, encouraged, and showcased. Among the many highlights in building an innovation pipeline, the da Vinci Center’s Pre-X program assists students in communicating their ideas in a format designed for pitching to investors, sponsors, and accelerator programs. The experience culminates in Demo Day, which over the past three years has connected more than 140 students from 11 VCU schools and colleges to potential funders as well as employers. Students have gone on to regional and national accelerator programs and Fortune 500 companies.

**Section L. Diversity, Equity and Inclusion (DEI) Strategic Plan:** Provide an update on the completion status of your institution’s plan that is being coordinated with the Governor’s Director of Diversity, Equity and Inclusion. If a copy of the plan is available, please include it when your institution submits its initial plan. If a copy of the plan is not available for July 1 or if changes are made, please provide a copy with your institution’s final plan submission on October 1.

**RESPONSE:**

The Quest 2025: Together We Transform was submitted on June 5, 2021 as the official submission for the One Virginia Plan. In addition to a focus on diversity, equity and inclusion highlighted in Theme IV, Quest 2025 contextualizes VCU's DEI goals and efforts as it relates to the university's overall strategic plan. Alternatively, please visit the [Quest website](https://quest.vcu.edu/) for more information.

The year 2021 has been a consequential year for the Office of Institutional Equity, Effectiveness and Success (IES) and is optimally positioned to lead in advancing critical components of Quest 2025 to completion. When the pandemic began in early 2020, IES launched Climatext - a tool that utilizes students’ text messaging app on their smartphones to measure sentiment around significant topics and events. The sentiments were analyzed and advisories were provided to VCU administration to inform their decisions around remote instruction, academics, and vaccinations.

IES also provided oversight for several education and training programs like the Diversity and Inclusion Leadership Certificate program and RAMmalogues (both from its IExcel Education program), Active Citizens Toolkit as a way for students to learn more about activism in the community, and Psychological Readiness Training for employees who are seeking to return to campus.

In the second half of the current biennium, IES will continue to make strides in areas outside of diversity, equity, and inclusion for the 2021-2022 academic year, merging with long-time strategic partners including the Center for Community Engagement and Impact and Institute for Inclusion, Inquiry, and Innovation.

**Section M. Economic Development Annual Report:** Provide a copy of any report your institution has produced about its economic development contributions.

**RESPONSE:**

A [2017 report](https://cura.vcu.edu/media/cura/pdfs/cura-documents/TheImpactofVCUontheRichmondRegion.pdf) developed by VCU’s Center for Urban and Regional Analysis found that the university generates nearly $6 billion in economic activity and supports 63,000 jobs in Virginia. Detailed [program and policy impact reports](https://cura.vcu.edu/reports/policy--program-impact-evaluation/) are also available.

Mirroring VCU’s academic focus, the economic impact in the Commonwealth is equally well aligned to advance the Virginia Plan goals: Equitable, Affordable, and Transformative. Examples and highlights of VCU’s recent contributions to economic development are cited below centered on two particular areas: research and job development, and strengthening talent pipelines.

**Research and job development**

* **Medicines for All Institute** was established with a [$25 million gift from the Bill & Melinda Gates Foundation](https://news.vcu.edu/article/24Gates), after funding $15 million in earlier research. The partnership with Phlow Corp. was established by a $354 million federal contract with the potential to reach $812 million. This partnership has already resulted in businesses co-locating near Petersburg, creating an advanced pharmaceutical manufacturing cluster, including [AMPAC Fine Chemicals](https://www.governor.virginia.gov/newsroom/all-releases/2021/may/headline-894870-en.html) ([$25 million investment, 156 new jobs](https://www.governor.virginia.gov/newsroom/all-releases/2021/may/headline-894870-en.html)) and [CIVICA R](https://civicarx.org/civica-to-build-an-essential-medicines-manufacturing-facility-in-virginia/) ([$124.5 million investment, 180 new jobs](https://civicarx.org/civica-to-build-an-essential-medicines-manufacturing-facility-in-virginia/)).
* **VCU Innovation Gateway** facilitates commercialization of university inventions and promotes industry collaborations and regional economic development. In 2019, Innovation Gateway generated $2.5M in licensing revenue, filed 166 patents, and led 145 industry engagements. They also launched six VCU startups. The distribution of inventions by school, which includes 82 in the School of Medicine and 51 in the College of Engineering, demonstrates the immense role that VCU, its students, and faculty have in advancing the region’s reputation as a hub for innovation in science, technology, and medicine.
* **VCU Engineering** [is a partner](https://news.vcu.edu/faculty-and-staff/VCU_part_of_111M_cybersecurity_manufacturing_partnership) in the national [Cybersecurity Manufacturing Innovation Institute](http://cymanii.org/)(CyManII), a $111 million public-private partnership. The center serves as a regional resource hub for cyber defense research and education throughout central Virginia. VCU’s [Cybersecurity Center](https://cybersecurity.vcu.edu/) will lead the university’s efforts in this partnership.
* **Massey Cancer Center**, as one of only two cancer centers in the Commonwealth designated by the National Cancer Institute, has an active role in shaping the cancer research agenda in Virginia. It is an exceptional contributor to the Commonwealth’s prosperity through world-class patient services, innovative research, its academic mission to educate the next generation of physicians and scientists, and its role in creating jobs for Virginians. Massey’s accomplishments over the last biennium include, among others:
	+ $37.4M in cancer-related research awards (FY20)
	+ 331 cancer-related publications (FY20)
	+ $14.9M in philanthropy (FY2021 to date)

**Student Career Development**

* VCU Engineering is expanding access to careers in the region's rapidly growing technology sector. Joining forces with business leaders and community organizations, VCU Engineering is mapping Central Virginia’s existing technology education opportunities, including all K-12 and higher-education programs, tech-industry certifications and ad-hoc opportunities to upskill the workforce for the digital economy. Through the new [Tech-Talent Pathways Project](https://egr.vcu.edu/about/go-virginia/)**,** these leaders are also pinpointing gaps where resources don’t exist — or access to them is hindered by barriers. They aim to revitalize these “tech-education deserts” by creating stronger links across the tech-education community. Growth and Opportunity for Virginia (GO Virginia), a bipartisan, business-led economic development initiative, provided $100,000 toward this initiative.
* A $100,000 grant to advance diversity in STEM from the [Bank of America](https://egr.vcu.edu/news-events/news/12142020-vcu-engineering-partners-with-bank-of-america-to-advance-stem.html), with more funding expected in the future.
* To cultivate affordable post-secondary education pathways for traditional, non-traditional and returning students, VCU Engineering engaged numerous public and private sector partners to create a comprehensive plan to better align the existing tech talent education programs in the Greater Richmond and the Virginia Gateway region. The College of Engineering developed a framework to catalog and map the region’s existing tech talent workforce activities, identify specific opportunities to improve alignment and close gaps, develop proposals for expanded partnerships between industry, the region’s school systems, community colleges and universities, and create strategies to facilitate innovation across the Tech Talent Pipeline.
* **REAL** has undertaken a variety of initiatives designed to strengthen the talent pipeline. Of note is REAL’s leadership in creating the RVA-VTOP Collaborative, which, in partnership with ChamberRVA, is strategically focused on breaking down the silos that currently pervade work-based learning efforts throughout the region and addresing region-specific challenges that have impeded successful and diverse internship program growth.
* **The VCU da Vinci Center for Innovation and VCU REAL** are piloting a grant-funded Entrepreneur Academythat brings together 150 first-generation and low-income students alongside 50 community members identified by the Jackson Ward Collective and Activation Capital. Together this 200 person cohort will engage in four learning modules that will result in digital badges for students and community members. These intentional community partnerships will result in an easily identifiable direct pipeline of student talent and student founders, which will enhance career opportunities and outcomes of student experience and local innovation.
* In January 2020, VCU announced a first of its kind [**Shift Retail Lab**](https://davincicenter.vcu.edu/shift/) - a prototype for the future of innovation and entrepreneurship education that will also be leveraged for the Entrepreneur Academy. Slated to launch in Summer 2021, the 2,700 square foot storefront on Broad Street was designed from inception as a community asset that connects students to end users, customers, and community leaders in the entrepreneurship ecosystem. Blurring the lines between classroom and retail space, students will engage in applied entrepreneurship experiences regardless of degree program. A testament to VCU’s role in the ecosystem, storefront construction was philanthropically funded 100% by the private industry.